

ENGINEERS IN BUSINESS FELLOWSHIP

ANNUAL REPORT

2020/21



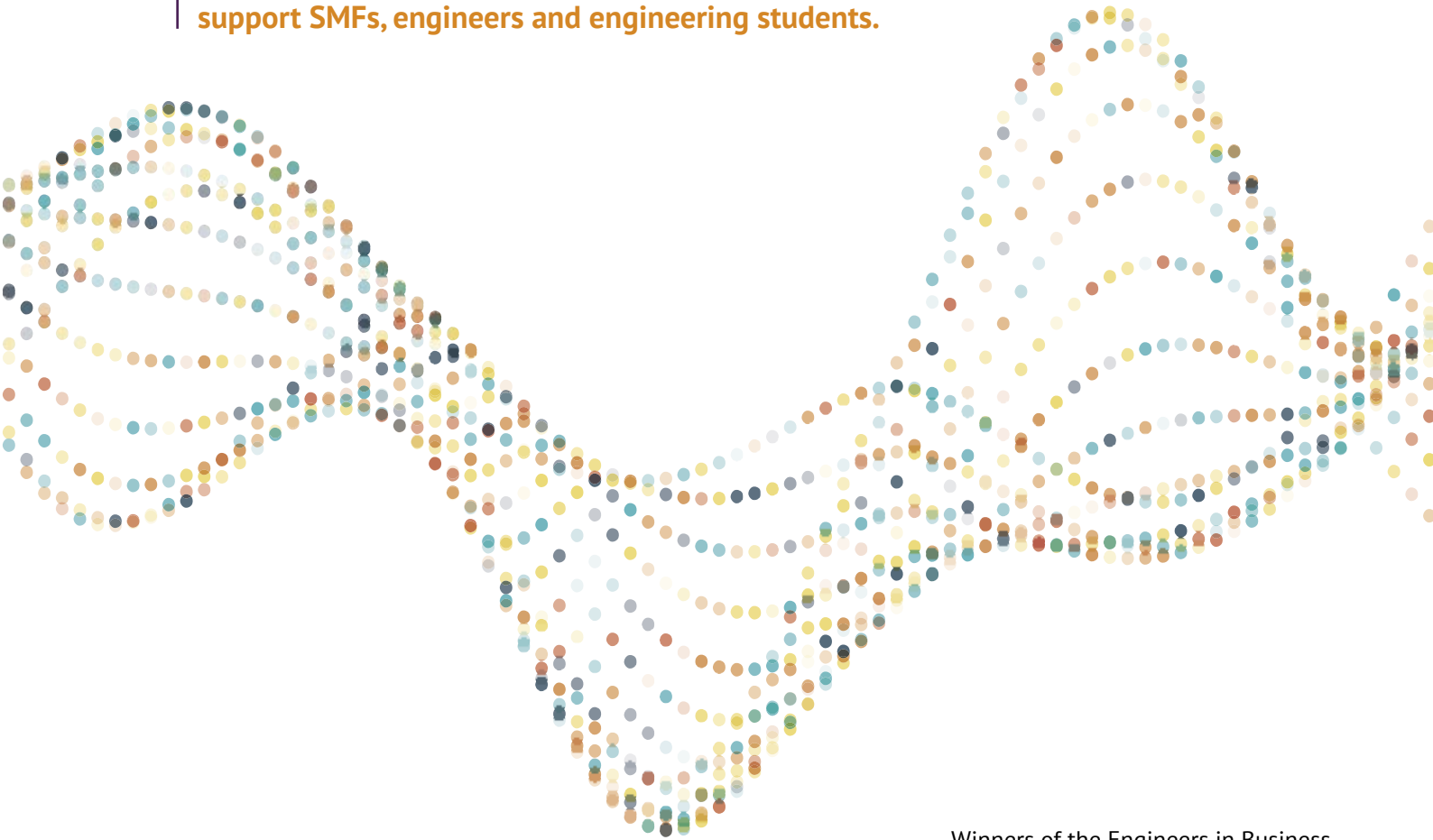


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REVIEW OF THE YEAR

In a year like no other, we continued to engage and support SMFs, engineers and engineering students.



Winners of the Engineers in Business
Champion of Champions Competition 2020





David Falzani MBE,
President

PRESIDENT'S REVIEW OF 2020/21

Covid-19 has forced us to transform the way we live and work. EIBF has been supporting our SMFs and our university partners with their Engineers in Business competitions. Over the past months we have also updated our administration, accounting and database.

EXPLORING NEW WAYS TO COMMUNICATE

This past year we abandoned our usual calendar of meetings and networking events and switched to online activities. Although this denied us the pleasure of meeting up face to face, it did have the benefit of enabling more SMFs living outside the UK to join activities. Consequently, at the online events that we were able to hold, we had greater numbers of participants than previous years.

We continued with our marketing and advertising plan to raise the profile of the award scheme and to reach a more diverse range of future candidates. The LinkedIn advertising campaign to stimulate enquiries for the scholarship generated a great deal of interest which led to an abundance of high quality applicants in 2019/2020. For this reason, eleven awards were given this year instead of the usual ten. An online "Business Education for Engineers Clinic" was advertised on LinkedIn and 40 engineers attended the session in March. Trustees Mike Astell and Hersh Shah joined me to answer questions about taking an MBA in general and specifically about the Sainsbury Management Fellows Scheme. The session was well-received and over 90% of those attending the event said that they were planning to apply for an SMF Scholarship. Another business education clinic has been planned for later this year.

Before I continue to discuss the year's activities, it is with great sadness that I acknowledge the passing of two of SMF's

greatest supporters – Alpesh Amin and Paul Dolan. Both Alpesh and Paul were founding trustees of Engineers in Business Fellowship and as such had a major role to play in helping to set up Engineers in Business Fellowship as a company in 2011 and as a registered charity in 2012. Alpesh first joined the Executive Committee in 2008 and then served as Treasurer from 2009 to 2013. He was well liked by everyone and quick to volunteer. Even after moving to Palo Alto, to set up the US office of Atlantic Bridge Capital, Alpesh kept in touch with us and attended SMF events whenever possible. He will be greatly missed by the many of us who were fortunate enough to call him a friend. Paul was a valued member of SMF and active on the executive committee and, later, the board of trustees for over 20 years. He first joined the Executive Committee in 1997, then served as Treasurer from 1998 to 2000, as Secretary from 2001 and finally as President from 2003 – 2006. He became Secretary of EIBF in 2014 and served in this role until his death in April. Paul participated in more scholarship panel interviews than any other SMF and helped to make the SMF Award “dream” come true for many SMF applicants. He stayed in touch with Fellows from all year groups and had many dear friends. We will never forget the contributions of both Paul and Alpesh and will be inspired by their examples.

CHAMPIONING BUSINESS SKILLS TO YOUNG ENGINEERS

Sponsoring business competitions at universities has been an effective way for us to engage with young engineering students and engineers. The sponsorship is run in association with leading universities and colleges, leveraging existing competitions or elective modules and existing arrangements within higher and further educational institutions, such as

those between engineering departments and affiliated business schools. The competitions encourage young engineers to get involved in business innovation and develop a passion for entrepreneurship at an early stage.

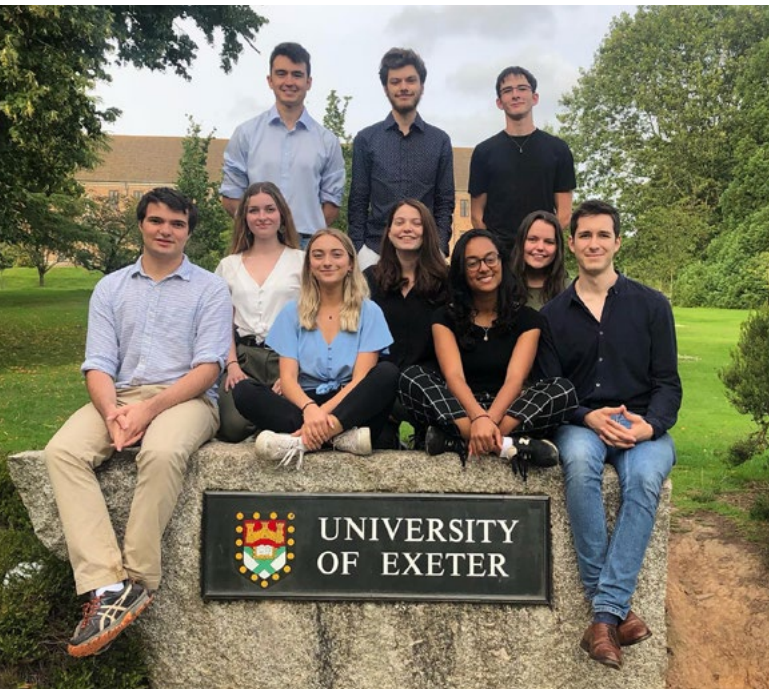
Many of our university partners told us that it has been difficult to reach and engage with students during lockdown. Despite this, 90% of our partner universities were able to hold their competitions. We currently work with 32 universities and hope to expand this number when university education returns to normal. However, we are pleased to report that, notwithstanding the adversity, participation has still been high with 147,198 students receiving EIBF messages and 4,142 students participating in competitions, 3,014 of whom were students studying engineering, computer science and biomedicine.

As well as receiving cash prizes, and possibly being far more valuable, the winning team members are offered ongoing guidance and support from SMF mentors. To read more about some of this year’s competitions and their winners, see pages 14–26.

The Engineers in Business Champion of Champions Final was held in October and 27 universities offered competitors. The online event was broadcast live and over 300 viewers from around the world tuned in. Ten university teams comprising engineering graduates and postgraduates pitched their business innovations in the hope of winning a share of the £10,000 prize fund. Publicity before and after the event reached an audience of 7.2 million. This group included students considering engineering as a course of study, those already studying engineering and engineers, some of whom may be future candidates for Sainsbury Management Fellows’ Scholarships.



Dr Allan Rennie, Professor at Lancaster University's Engineering Department with the Business Development Project Module Prize Winners and SMF Mike Astell.



Team PETexe from the University of Exeter were finalists and won First Prize in the EIB Champion of Champions Final

Our partnership with the Royal Academy of Engineering continues and allows us to interact with the brightest and best young engineers. In addition to mentoring Engineering Leaders Scholarship winners, EIBF participated in the following events:

- The Enterprise Hub was created to help bring about a step change in the success of UK-based, entrepreneurial technology businesses and the contribution they make to economic growth. Some of the UK's most successful entrepreneurs and business leaders are helping to identify and support the most promising and innovative entrepreneurs. Although events were curtailed this year due to COVID-19, SMFs continue to support activities:
 - Richard Smith and Ed Snow continue to offer mentoring support to the Hub Members.
 - Mike Astell and Adam Bazire volunteered to lead ten sessions to small groups of Hub Members on a variety of business topics.
- The Leaders in Innovation Fellowships Programme (LIF) aims to build the business skills of researchers within partner countries of the Newton Fund for entrepreneurship and commercialisation of their research. Cohorts of researchers are selected on the

basis of the excellence of their research and the potential of their innovations. They receive training in entrepreneurship, access to and time with expert mentors to develop their business plans and the opportunity to work in teams on a genuine challenge or opportunity faced by a UK-based technology driven organisation. The two-week training is rounded off with a final day of pitches before a panel of judges. This year, John Callaghan and I were mentors for this programme and Henning von Spreckelsen helped with the judging. Andrew Hogwood, Hersh Shah and Chris Shelley also helped to review applications to the LIF Community Grant Programme which is designed to assist LIF alumni to deliver community building activities around the world.

- The Engineering Leaders' Scholarship selection event in March was supported by SMFs Mike Astell, Rachel Fitzsimmons, Sinead O'Sullivan and Hersh Shah, who all helped to select the new cohort of 38 Engineering Leaders' Scholarship winners.
- Eleven SMF Scholarships were awarded this past year with SMFs Imoni Akpofure, Andrew de Rozairo and Rob Gill participating on the interview panels.

We wish to thank all of the above SMFs for their invaluable support.



This year's scholarship award winners



*Julia Nammuni
(above, LBS 2014)
and Sinead O'Sullivan
below, Harvard
2017) participated
in International
Women's Day
#ChooseToChallenge*

ENCOURAGING MEMBER ENGAGEMENT

It was regrettable but necessary that we cancel our Annual Dinner in May and again in November. All activities which could go forward were conducted online. In these circumstances, we were pleased to attract a large and diverse group of SMFs from around the world. In addition, several SMFs volunteered to judge and award prizes at EIBF-sponsored online business competitions:

- In November 2019 Mike Astell gave a presentation on SMF and presented the EIB Competition Prizes at Lancaster University.
- In October 2020 at the online Champion of Champions Competition, SMFs Chris Hughes, Henning von Spreckelsen and Chirag Shah talked, as motivational speakers, about their own entrepreneurial journeys.
- In November 2020 Taha Dar volunteered to be a case study and mentor for Ingenuity, a national programme looking to develop and invest in the next generation of impact driven start-ups.
- In February 2021 George Fowkes and Simon Fowles took part in the judging process at Kingston's virtual Bright Ideas Competition and Cathy Breeze awarded the prizes to very grateful students.

- In March 2021 Julia Nammuni and Sinead O'Sullivan helped us to celebrate International Women's Day by contributing their stories about challenges they faced and Hersh Shah was a guest panellist at University of Exeter's Elevate 2021 Competition
- Several SMFs graciously stepped forward to help the University of Warwick provide career planning and advice sessions for their Engineering Business Management students: Chris Mannion, Sagnik Mukherjee, Tony Nolan, and Sam Venin. The University of Warwick was absolutely delighted with their offers of help.
- Many SMFs volunteered to be mentors to EIBF business competition winners and also agreed to be case studies.

In January 2021 24 SMFs appeared online for the SMF Investor Group Networking Event. SMF Michael Hill hosted this fast-paced session with presentations by Chirag Shah, Ed Snow, Stephen Sheridan and Ana Avaliani, Director, Enterprise and Sustainable Development at the RAEng. The focus was on how companies have had to adapt and, in particular, raise capital in volatile markets. The aim of the group is to form a network that can connect, invest and build earlier stage companies.

We wish to thank all those SMFs who participated in events and also those who volunteered to help out at EIBF business competitions.

SECURING THE FUTURE OF THE SCHEME

We are grateful to Sainsbury Management Fellows for donating £122,000 in FY2020/2021. With interest, Gift Aid and subsequent matching, £262,000 has been added to the Endowment in the past year. The Endowment now stands at £2.5M, a significant step towards our target of £10M, although some way from providing the funds necessary to maintain the Sainsbury Management Fellowship Scheme. Thus far 15% of Sainsbury Management Fellows have contributed; we hope that many more SMFs will step forward to donate over the next few years. Tax efficient giving arrangements have been established for Fellows living in the USA, Belgium, France and Switzerland and more countries will be added as required. We also welcome any suggestions for potential corporate donors.

Finally, I would like to thank our Patron, Lord Sainsbury of Turville, for his continued support of the Sainsbury Management Fellows, the Gatsby Trustees for their counsel and the Royal Academy of Engineering for its partnership.

David Falzani MBE

President



THE BUSINESS OF THE FELLOWSHIP

Engineers in Business Fellowship (EIBF) is a registered charity that promotes the importance and value of business education for engineers to improve the performance of the UK and global economies. The Sainsbury Management Fellows is the MBA scholarship scheme of Engineers in Business Fellowship.

EIBF empowers engineers to become leaders in UK industry, helps them achieve their full potential and attain career goals, and inspires a passion for business innovation amongst undergraduate engineers. It does this through:

- Sainsbury Management Fellows MBA scholarships – up to £500,000 awarded each year
- Fundraising campaign to sustain the scholarship scheme and help more engineers gain an MBA
- Career and entrepreneur mentoring
- Business competitions aimed at engineering students and recent graduates

Engineers in Business Fellowship is guided by the vision of its patron, Lord Sainsbury of Turville, for a high calibre cadre of engineers with an international business education who occupy leadership positions in British industrial companies and start-ups and who serve as examples to engineering students and young engineers.

MEMBERSHIP

Members of Engineers in Business Fellowship have each received a Sainsbury Management Fellowship Award, which helps them study for an MBA at a leading international business school. The awards began in 1987 and are administered by the Royal Academy of Engineering and are funded by the Gatsby Charitable Foundation.

BUSINESS PLAN

The Fellowship’s activities are collated in the business plan. This includes a fundraising campaign which began in FY2014.



Samarth Sharma (far right) with fellow INSEAD graduates in December 2017



President:
David Falzani MBE BEng
MTech MBA CEng FIMechE



Treasurer:
Adam Bazire BA MBA
CEng FIET



**Secretary/Director
of Communications:**
Cathleen Breeze BA MBA



Imoni Akpofure BEng MSc
MBA CEng



Mike Astell BEng MBA
CEng FIMechE



Simon Bonini MEng MBA
CEng FICHEM



Mope Ogunsulire BSc MSc MBA
(appointed November 2020)



Hersh Shah MEng MBA CF



Henning von Spreckelsen
MEng MBA CEng MIET



Nigel Thomas BSc MloD



David Weston BSc(Eng) MBA
CEng FIMechE ACGI (resigned
November 2020)

TRUSTEES

The Fellowship is governed by the above Board of Trustees which meets quarterly. Officers and members receive no financial remuneration from the Fellowship.

DISCLOSURE OF DIRECTORSHIPS

Several members of the Executive Committee and Board of Trustees hold directorships of British and foreign corporations, a list of which is available from the Director of Communications. None of the directorships are with companies which do business with EIBF.

STEERING COMMITTEE

The Fellowship liaises with the Royal Academy of Engineering via a Steering Committee chaired by Tim Chapman FREng. Other members include Fellows of the Royal Academy of Engineering: Clive Buckberry, James Martin and RAEng staff members: Dr Rhys Morgan, Lynda Mann and Veronica Frincu. Representing EIBF are SMFs Mike

Astell, David Falzani MBE, Henning von Spreckelsen and Cathy Breeze. Strategy and management of the award scheme and links with other RAEng programmes and the activities of Engineers in Business Fellowship are reviewed on a regular basis.

SOURCES OF INCOME

Although funded to some extent by subscriptions from its members, the Fellowship has received the vast majority of its funding from The Gatsby Charitable Foundation. Gifts from members which have been received this year as part of the fundraising campaign have been added to the Expendable Endowment Fund established to fund future Sainsbury Management Fellowship Awards.

EIBF received no grants or awards from public bodies during the year.

Cathleen Breeze
Secretary

SMF AWARD WINNERS

Mihir Bhushan

MEng, Engineering, University of Cambridge

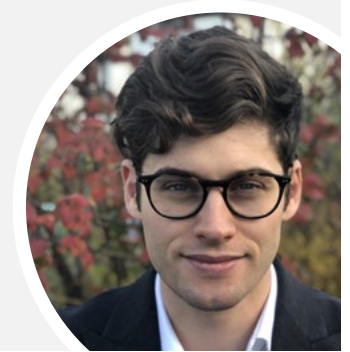
Before starting his MBA at MIT Sloan School of Management, Mihir was a digital product focussed FinTech Entrepreneur. In 2017, he built a group saving app called Squad which won an Open Banking for Good award from Nationwide Ventures that helped fund the go to market proposition. Squad was eventually acquired by a UK based FinTech called StepLadder whose digital ROSCA deposit raising products were helping first time homebuyers to save for their first homes. As part of the acquisition, Mihir joined StepLadder as its Chief Product Officer and developed its digital product offering along with a team of developers.



Josef Bromovsky

CFA, BEng Civil Engineering, University of Nottingham

Prior to commencing his MBA at Harvard Business School, Josef's experience was across the engineering and construction sector. In 2013 he joined Balfour Beatty as part of the central strategy team, where he was responsible for a number of strategic and operational performance improvement initiatives. In 2017 he joined AECOM where he worked as part of the Digital Transformation programme, which was responsible for the development and implementation of several machine learning and AI based tools for the construction industry. These tools focused on improving productivity, safety and quality across the design and construction lifecycle.



Mario Carandente

EngD, University of Warwick, MSc Materials Engineering, University of Loughborough

Mario will start his MBA at MIT Sloan in September 2021. While studying for his EngD which was sponsored by Jaguar Land Rover (JLR), he developed a new approach for the design and assembly of lightweight architectures which formed part of JLR research into lightweight technology to reduce CO2 emissions and environmental impact of vehicles. In January 2018, he became a Principal Engineer at McLaren automotive where he leads the design and engineering of body panel components across all McLaren platforms. Mario is an ambassador of STEM subjects and has collaborated with several charity organisations including Rotary Clubs and Generating Genius to encourage students from disadvantaged backgrounds to pursue STEM careers.



Kieran Chandler

CEng IMechE, MEng, University of Bath

Before starting his MBA at INSEAD, Kieran worked as a Solutions Specialist for Lokad, a software company based in Paris which applies the latest statistical techniques to optimise supply chain decisions. He established a dialogue with worldwide companies and managed all commercial aspects of the business from project definition to contract negotiations. He also presented a dedicated Supply Chain YouTube channel, LokadTV, conducting interviews on Industry 4.0 topics such as forecasting, artificial intelligence, blockchains, machine learning, cloud computing and big data. Previously he worked for Frazer-Nash Consultancy as a senior design engineer where he worked across a range of different industries contributing towards the design of a next generation power plant, the certification of aerospace components and as project manager of an early stage innovation project for the energy industry.



Mahmoud Gawish CEng IChemE, MEng, Chemical Engineering,
University of Manchester

Mahmoud worked as a Process Safety Engineer on capital oil and gas projects prior to commencing his MBA at INSEAD. Recently he was a consultant providing technical safety engineering services to clients in the UK, France, India and the Netherlands. He started his career in Hong Kong supporting the engineering, procurement and construction companies within the APAC region. He then supported UK North Sea contractors and operators in managing major incident risks. He worked for Eni UK and provided technical support to onshore and offshore assets, including Liverpool Bay and Hewett. This included delivering specialist technical safety assessment, advice and guidance on activities and issues affecting the integrity of ageing upstream assets. Mahmoud has held several volunteering roles within the Institution of Chemical Engineers.



Rebecca Grady MEng, Engineering Science, University of Oxford

Prior to starting her MBA at London Business School, Rebecca worked at Ramboll, a global engineering consultancy, progressing from graduate engineer to principal project manager. She managed some exciting projects including the British Antarctic Survey's Rothera Modernisation Project, where she led the development of a consolidated masterplan encapsulating all future needs for the station for the next 25 years. She brought together a team of multi-disciplinary engineers, architects and BAS stakeholders to develop concept design solutions appropriate for the unique logistical and operational challenges of Antarctica. Rebecca set the vision for value-driven design and was an advocate for innovation. She initiated the development of a bespoke energy modelling tool, interactive decision-making dashboards and a unique snow deflector.



Gordon Irving CEng IMechE, MEng, Mechanical Engineering,
University of Strathclyde

Prior to starting his MBA at London Business School, Gordon spent eight years working in the energy sector. The first four of these were as a subsea engineer based in Aberdeen where he generated innovative concepts and performed complex analyses on high pressure high temperature (HP/HT) subsea pipeline systems. During this time, he also organised national learning and development events for graduates. Gordon then moved to the Middle East, working in project engineering and business development roles. He created process improvement and implementation management systems for the construction of major energy infrastructure and led the growth of the offshore engineering business, securing millions of pounds of new engineering work.



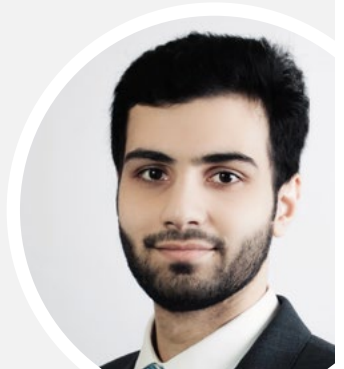
Rauf Khan MEng Materials Engineering, University of Cambridge, BSc Chemistry, University of St Andrews

Before joining Stanford, Rauf worked in investment banking and consulting across the UK, US and Middle East. Throughout his career he has helped VC firms invest in clean energy technology globally, facilitated the IPO of a US electric-vehicle company and revamped product portfolios for the largest fintech companies. At university he developed fuel cells, clean-tech and evaluated public and private equity investment in nanotechnology. Rauf is passionate about developing others; he founded a global education network teaching literacy to low-income teens and parents, launched mental-health solutions in the Middle East, coached women in developing countries to get into top STEM universities and has created digital learning programmes that have reached over 30,000 people.



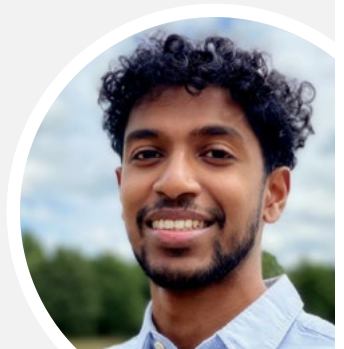
Ahmad Khattab MSc, Structural Engineering, Imperial College London BEng, UCL

Ahmad worked as a Principal Engineer in the Transportation & Infrastructure sector prior to commencing his MBA at Imperial. He managed multi-disciplinary projects including the Ardleigh Green Bridge Replacement and Crossrail's Farringdon Station. He also led WSP's framework with the £6.2bn M25 Motorway DBFO, delivering renewal and improvement packages for Europe's busiest motorway. Additionally, Ahmad undertook integrated assurance reviews and advised Transport for London's board on high risk £100m+ infrastructure projects including Rotherhithe Tunnel and Hammersmith Bridge. He previously served as Director & Trustee for Global Brigades, an international development charity, where he established strategic relationships and supported expansion efforts within Honduras, Panama and Nicaragua.



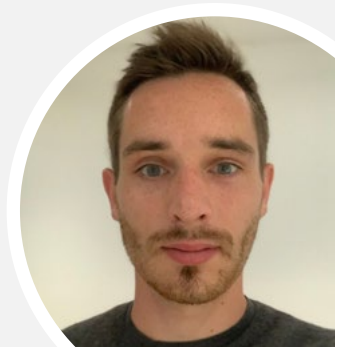
Jayshan Ratnakumar MEng, Mechanical Engineering, Imperial College London

Jayshan worked in both the Defence and Energy sectors for over 5 years before starting his MBA at Imperial College Business School. In 2015 he joined BAE Systems working on the UK's Nuclear Deterrent Submarine programme and in 2018 he became the Lead Senior Engineer for the submarine's steam turbo-generators. Jayshan then joined technology start-up GreenSpur Wind Ltd as its Lead Mechanical Engineer and led the development of the 250kW ferrite based permanent magnet generator for the wind turbine market. Since this successful project, Jayshan headed the applied engineering department and won three Innovate UK grants totalling £600,000 in 2020.



Sam Vennin PhD, King's College London, MSc, Biomedical Engineering, Imperial College London MEng, Electrical Engineering, ENSEA

Prior to beginning his MBA at LBS, Sam trained as an Electrical and Biomedical Engineer in France and in the UK. He used his engineering background to earn a PhD in Cardiovascular Science during which time he developed technologies to help clinicians to assess cardiovascular functions non-invasively. He subsequently worked as an engineer research fellow at Guy's and St Thomas' Hospital NHS Foundation Trust on the clinical translation of these technologies by coordinating a multi-disciplinary team of clinicians and engineers. Sam has led many STEM initiatives and is passionate about increasing the profile of engineers in society, particularly in healthcare.



MEMBERS' HIGHLIGHTS

BY GRADUATION YEAR

2020

Jegadeesh Sithamparathas (MIT) is now a Product Manager at Google.

2018

Abhi Morey (INSEAD) is now Senior Manager, Global Commercial Operations & Strategy at Beckman Coulter Life Sciences.

2016

Andrew Buckley (LBS) has been recently appointed as Director, Infrastructure and Projects Group at KPMG Australia.

2014

Russ Macmillan (INSEAD) is now Director, Rail Infrastructure North at the Department for Transport (DfT).

2013

Gil Rabbie (LBS) has been promoted to Digital Solutions & Capability Development Leader, Healthcare Solutions & Partnerships at Boston Scientific.

2012

Hind Zaki (Harvard) is now Director of Operations at Qatar Research, Development and Innovation, (QRDI) Council.

2007

Rob Deeming (Harvard) is now General Manager of the ahm health insurance business, based in Australia.

2006

Andrew Hogwood (INSEAD) is now Chief Digital Officer at Infinity International Foreign Exchange.

Graham MacGregor (INSEAD) is now Senior Vice President, Operational Excellence at Oil Search Limited.

Federico Suria (INSEAD) is now Enterprise Commercial Lead, Italy for Microsoft.

2005

Simon Bolton (IMD) is now CEO of Envipco Holding, a reverse vending machine manufacturer. Simon continues to reside in the UK although the company is headquartered in the Netherlands

2003

Richard Wazacz (Columbia) is now CEO of BrickVest, an online real estate Investment platform that directly connects investors with a variety of real estate investment opportunities.

2000

Graeme Purdy (INSEAD) is now a non-executive director of Bacanora Lithium Ltd.

1994

Phil Strong (ENPC) is CEO and founder of Zymbit – secures edge compute and IoT devices from cyber-physical attacks, based in California.

1992

Patrick Macdonald (INSEAD) has recently been appointed Chair of the IoD.

1990

Simon Bonini (INSEAD) is now on the board of directors at Lightning Fibre, a fibre network operator and ISP based in Eastbourne, East Sussex.

Nigel Wallbridge's (INSEAD) company Vivent, participated in the Smart Farming SideTrack Programme and was declared a winner by the **EIT Food Accelerator Network**, Europe's leading food innovation initiative.

ENGINEERS IN BUSINESS COMPETITION EXPANDS TO 32 UNIVERSITIES

For seven years, EIBF has run competitions which challenge engineering students to create a novel product that meets a need in society and demonstrates the use of engineering skills in the creative process. The aim is to encourage engineering students to consider business courses as part of their education.

This year the number of competitions unfortunately decreased due to the impact of the COVID-19 pandemic. However, notwithstanding the difficulties, we are pleased that 27 of our 32 universities were able to take part. Many of our university partners told us that it has been difficult to reach and engage with students during lockdown and as a result, participation fell this past year. Nevertheless, a total of 4,142 students (25% down from last year) participated in the competitions with a combined student/graduate audience of 147,198 (down 19% from last year). All of these students received core messages on the value of business education. Compared to last year, engineering students' participation also decreased from 3,651 to 3,014 (down 19% from last year). We thank all our university contacts for working so closely with us during this difficult

time, seeking advice on how best to deliver information and photography and on how flexible we can be during these exceptional circumstances. We have excellent stories to report on competition winners including teams at six universities which are new to EIBC – they are Aberystwyth University, Aston University, Imperial College Business School, London South Bank University, Swansea University and University of Warwick.

We have also partnered with Ingenuity, a national programme looking to develop and invest in the next generation of impact driven start-ups. Ingenuity is helping us to reach those universities we do not yet work with to facilitate collaboration with them next year.



We are proud to be working with so many excellent partners in the United Kingdom.

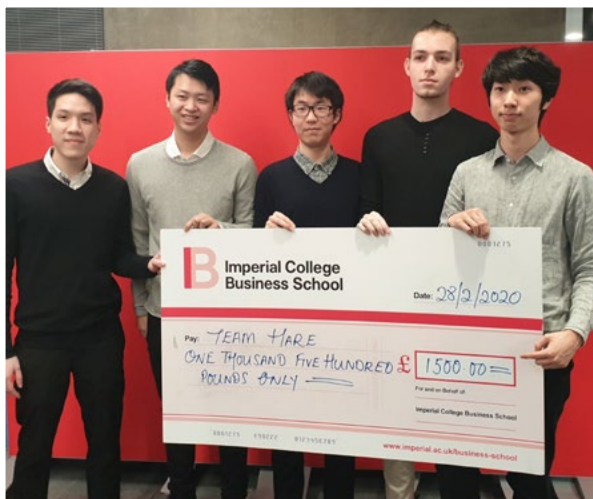
The following pages describe the diverse and exciting business ideas created by the winning teams:

IMPERIAL COLLEGE LONDON BUSINESS SCHOOL Business for Professionals of Engineering and Science module



EIBF supported Imperial College Business School's online undergraduate entrepreneurship course, Business for Professionals of Engineering and Science (BPES) 2019/20. Students participated in a pitch competition and were also selected through excellence in achievement based on their validation report coursework assignment, where students conducted experiments to test the hypotheses underlying their business idea.

The first prize of £1,500 went to the Hare Team for a text-based counselling app that aims to connect university and potentially high school students to counsellors instantaneously and directly.



First Prize Winners – Hare Team: Bernard Chan, Materials Science & Engineering; Paul Bigot, Materials Science & Engineering; Pichan Tangtrakulwong, Chemical Engineering; Hung-Ju Chueh, Biological Sciences and Ramita Peerapiroj, Chemistry.

“ the prize fund provided students with the confidence and self-belief that they had a strong business idea which they can pursue further. It also opened up more broadly the option to pursue a business career for some of the students. ”

Dr Harveen Chugh, Module Leader,
Entrepreneurship Online, BPES

The first runner-up team won its £750 prize for the creation of WeSport, a social app that allows players to meet with other players in the area/location they would like to play in.



Joint Second Prize Winner – WeSport Team: Aidan Cunnington, Mechanical Engineering; Chafic-Christopher Hasbani, Mechanical Engineering; Elizabeth Graham, Mechanical Engineering; Marc Bou Saleh, Electrical & Electronic Engineering with Management; Michael Wilkinson, Mechanical Engineering and Thomas Tawk, Mechanical Engineering.

The Garms Team was also awarded £750 for its innovation, Garms – an online platform dedicated to providing clothing rental solutions.



Joint Second Prize Winner – Garms Team: David Buchanan, Mechanical Engineering; Emmanuella Babasola, Civil Engineering; Ememabong Umoh, Mechanical Engineering; Igor Fomenkov, Electrical & Electronic Engineering with Management; Liam Webb, Mechanical Engineering and Paula Vila Ortega, Mechanical Engineering.

SWANSEA UNIVERSITY Invent for the planet global design challenge



Invent for the Planet is an intensive design experience which engages students at different universities around the world and tasks them with solving pressing problems in just 48 hours. Led by Swansea University's partner, Texas A&M University, students work in local teams to develop solutions to problems such as food security, waste management, energy consumption, and flooding.

Three prizes were awarded for the most outstanding ideas. The first prize of £1,500 was awarded to LifeLight which offers an integrated approach to help notify motorists of oncoming emergency medical services (EMS) vehicles through an IoT system architecture. LifeLight notifies drivers when an EMS vehicle is up to two kilometres away, allowing sufficient time for traffic to accommodate its passing.



First Prize Winner – LifeLight: Professor Huw Summers, Head of the College of Engineering with Mahmoud Elshenawy, Materials Science and Engineering; Alexander Santo Ruiz, Mechanical Engineering; Patryk Adamiak, Mechanical Engineering and Olimpian Belu, Mechanical Engineering.

The second prize of £1,000 went to the creators of SEAPOD, a device which will remove plastics from waterways. SEAPOD sits on top of the water's surface and a suction motion collects macro, micro and nano plastics. Macro and micro plastics are filtered through SEAPOD and nano plastics are filtered through a sand layer to collect them. The SEAPOD then compresses the plastic to make bricks which can be used in developing countries.



Second Prize Winner – SEAPOD: Professor Huw Summers, Head of the College of Engineering; Hamza Eren Gunaltay, Aerospace Engineering; Florence Mayo, Medical Engineering; Roby Singh, Electrical Engineering; Jessica Britton, Mechanical Engineering; Michal Urbanski, Mechanical Engineering and Abigail Crane, 3 Chemical Engineering.

The News Lock team won the best Teamwork prize and won a £500 Engineers in Business prize. The team created News Lock, a mobile application that is designed to expose fake news. News Lock runs unobtrusively in the background of a mobile device and gives articles being read a truth score, after they have been assessed against a 'truthbank' of collected verified sources.



Team Work Winner – News Lock: Alister Henderson, Aerospace Engineering; Professor Huw Summers, Head of the College of Engineering; Maria Cristina Rius Magrina, Electrical Engineering; Rafique Swinscoe, Sport Science Engineering; Cameron Rees, Materials Engineering and Sem Ryan, Aerospace Engineering.

UNIVERSITY OF GREENWICH Enterprise challenge



Lucas Bowers and Elliot Reeve won the £3,000 Engineers in Business prize in the University of Greenwich's Enterprise Challenge which provides mentoring, training, and funding for entrepreneurial students who want to pursue their ideas.



Lucas Bowers (right), Software Engineering student with co-founder Elliot Reeve (left).

Lucas and Elliot developed Reel Share; an online talent platform created to disrupt the entertainment industry. The platform enables professionals in film, music, and dance to showcase talent, collaborate, generate fans, schedule auditions, and apply for jobs. Reel Share is aimed at B2C and B2B professionals who want to be represented by talent agencies and labels. Reel Share is the only platform focusing on the entertainment industry in this way, making it both unique and innovative.

Rachel Brown, Head of Enterprise and Innovation at the University of Greenwich said "The addition of the EIB prize to our Enterprise Challenge has raised the profile of the competition amongst engineering staff and students. The EIB prize prompted us to hold a special enterprise bootcamp at our Medway campus to attract more engineers to the competition and give them the opportunity to meet students from different subject areas. We found that these networking opportunities led to exciting innovations."

UNIVERSITY OF DUNDEE Venture competition

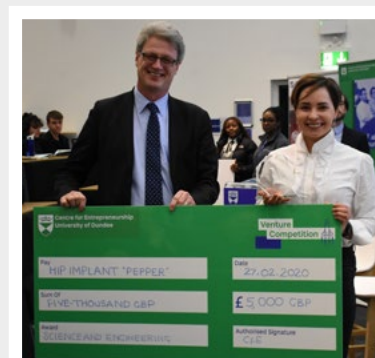


Venture is an annual business idea competition for University of Dundee students, staff, and recent graduates. With the award of an Engineers in Business prize fund, the university included a dedicated prize for the most innovative idea from science and engineering students.

The £3,000 EIB prize was awarded to Biomedical Engineer, Jekaterina Maksimova for her hip implant innovation called 'Pepper' which is aimed at young people. Pepper preserves natural bone stock and allows the desired load transfer across the thigh bone. It is produced with the Additive Manufacturing technique, which allows faster, cheaper and patient-specific solutions for a patient instead of off-the-shelf forged or casted implants which are heavier and stiffer due to the excessive amount of material, which leads to undesirable load transfer, implant loosening and revision surgery. The new implant will postpone future surgeries, allowing patients to live active lives.

Commenting on the value of the EIB prize, Brian McNicoll, Head of the Centre for Entrepreneurship said, "The second year of EIBC support for the Venture competition has

been invaluable in a number of ways: helping to raise the profile and credibility of the competition, provide crucial funding that allowed the competition to reach a record prize fund total of £31,000, and to allow there to be a Science and Engineering specific category which drew out a record number of applicants from Engineers at the University of Dundee resulting in a very worthy Biomedical Engineering graduate winner which we hope will gain significant traction at the EIBF Grand Final and with her project in general."



Winner: Jekaterina Maksimova, Biomedical Engineer, receives her award from Blair Grubb, Vice-Principal Education, University of Dundee.

UNIVERSITY OF WARWICK Engineers in Business competition



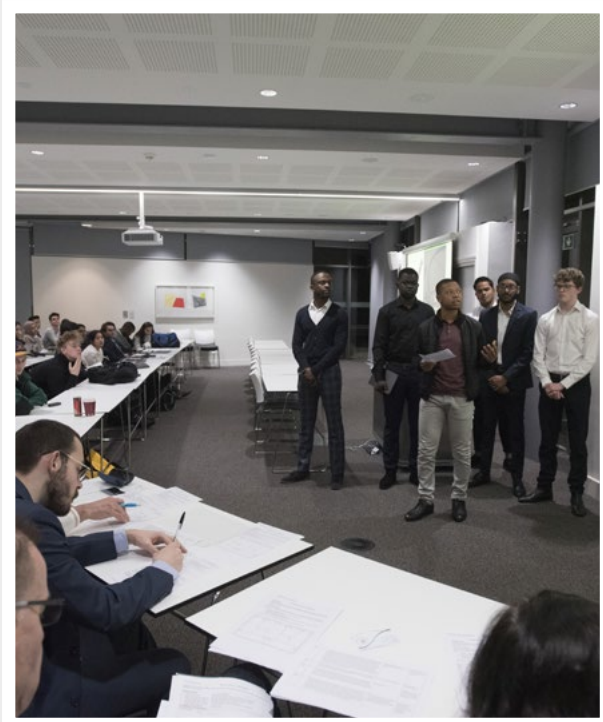
The University of Warwick ran its first Engineers in Business Competition for second-year engineering undergraduates enrolled on the Starting a Business Module. This gives engineering students the opportunity to understand and appreciate the challenges involved in setting up their own business. Two teams emerged as joint winners – ClimaCredits and Health First – with each receiving a £1,500 prize.

ClimaCredits is a reward scheme that provides consumers with cash-back when buying environmentally friendly and sustainable products. The points accumulated from the scheme can be spent on any product from a consortium of partner organisations. These partners range from small eco-friendly shops to large corporations such as supermarket chains and clothing retailers.



Joint Winner – ClimaCredits: Left to right are Pardeep Panesar, BEng Systems Engineering; Serkan Marasli (not visible), MEng Systems Engineering; Rohan Dir, MEng Systems Engineering; Eshan Gupta, BEng Systems Engineering; Mattias Langer, BEng Systems Engineering; Samuel Robson, MEng Engineering and Yasser Quereshi, MEng Systems Engineering.

Health First will provide the elderly and more vulnerable members of society with a wearable health device at a low cost; providing consumers with health statistics that are not normally accessible via a wearable device. Health First will create the software for the devices, analyse the data collected and provide customers with support regarding their safety and health.



Joint Winner – Health First: Left to right are Manyakwa Nshimbi, BEng Engineering; Nyok Kekui, BEng Civil Engineering; Harry Hammond, BEng Engineering; Bal Kudiyal Chamoli (behind), MEng Engineering; Gurpartap Lakhanpal, BEng Mechanical Engineering and Declan Hughes, BEng Mechanical Engineering.

“ The Engineers in Business Competition added great value to our module. It introduced a competitive element, which provided students with additional motivation to put effort into their business idea development. The competition also made our Dragons’ Den pitching event more realistic, as teams were pitching for real money. The optional mentoring by a Sainsbury Management Fellow is a brilliant way to support our winners in refining their business ideas. This way, the competition may not only foster students’ economic benefit, but may also promote future societal change and climate protection. ”

Dr Mona Mensmann, Assistant Professor of Entrepreneurship and Innovation, Warwick Business School, Module Leader of the ‘Starting a Business’ Module

ANGLIA RUSKIN UNIVERSITY Big Pitch competition

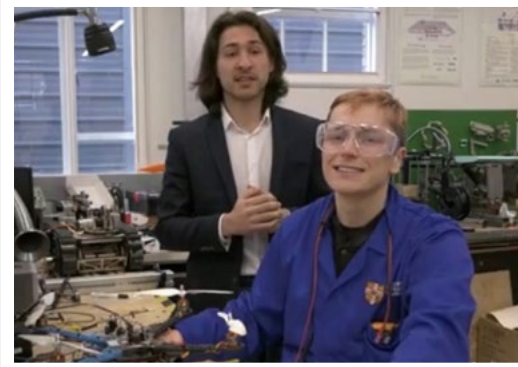


The Engineers in Business prize in Anglia Ruskin's Big Pitch competition for undergraduate and postgraduate students was awarded to the AC Biode Team comprising Ignacio Gonzalez-Alcalde, BSc (Hons) International Business Management at Anglia Ruskin University, and Robert Kunzmann, who is studying a PhD in Engineering at the University of Cambridge.

“ *The Engineers in Business prize provides a focus for our engineering students to think about how their engineering skills can contribute to business innovation and influence their prospects after university.* ”

Marcia Baldry-Bryan, Enterprise & Entrepreneurship Manager at Anglia Ruskin University

The AC Biode team has developed a battery that integrates a new type of electrode, the Biode, to enable an AC system for power storage to deliver batteries that have more capacity, last longer and are safer.



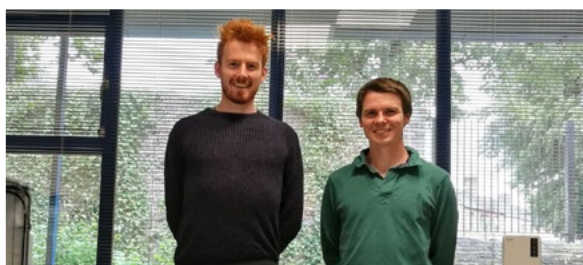
Winner – AC Biode Team: Ignacio Gonzalez-Alcalde, BSc (Hons) International Business Management (Anglia Ruskin University) and Robert Kunzmann, studying a PhD in Engineering at the University of Cambridge.

CARDIFF UNIVERSITY Start-up Awards



The EIB funding was incorporated into Cardiff University's Start-up Awards, which provide prizes and support to help students and graduates develop innovative business ideas. Participants first pitch for smaller amounts of funding to assist with validating their ideas. In the final, participants compete for larger sums of funding and support services such as legal and banking advice.

The £3,000 EIB prize was awarded to the creators of Rusty Design, a rapid prototyping and small-scale manufacturing business which has two main revenue generating processes. Rusty Design has completed six projects for clients to date.



Winner – Rusty Design: Right, Bleddyn Williams, Doctor of Philosophy (Biosciences) with co-founder Morgan Williams, who has a BSc in Sports Science and an MSc in Sports Engineering.

“ *Thanks to the EIB funding our start-up support has had greater visibility amongst some of our most innovative students. As a result, we have been able to support and grow an extremely ambitious and innovative business. The funding has also helped to grow our network of supporters and collaborators amongst academics in the School of Engineering, which increased opportunities to deliver enterprise and innovation content to students in the school. This includes talks to launch a new summer school in 2021 specifically around entrepreneurship for engineers and computer scientists.* ”

Rhys Pearce-Palmer, Enterprise Manager, Cardiff University

QUEEN'S UNIVERSITY BELFAST Dragons' Den competition



Queen's University Belfast's Dragons' Den competition is one of many initiatives organised by Enterprise SU, the entrepreneurial arm of Queen's Students' Union which helps students develop enterprise skills and start their own businesses. The £3,000 Engineers in Business prize fund was divided between three equally deserving winners. Each winner received a total of £4,000 prize money, £1,000 of which was an EIB award.

Naomi McGregor, a Product Design Engineering graduate, designed Movetru: a suit that will track misalignment throughout the body without hindering movement, providing industry experts with in-depth movement analysis and provide clients with daily recommendations for improvement to prevent injury or to recover from injury at a faster rate.



Winner – Movetru: Naomi McGregor, Product Design Engineering.

“ We love having Engineers in Business involved, because our Dragons' Den competition gives the students a chance to show off their innovations outside of the classroom and understand that there are wider opportunities for our students outside of being employed at large companies. Having Engineers in Business involved in this competition adds a level of Engineering 'legitimacy' to the competition and enables students to foster a healthy spirit of competition between their classmates. ”

Francesca Morelli, Enterprise Support Officer at Queen's University Belfast

Peter Gilleece's business innovation reduces plastic waste by creating a new material made from 100% chicken feathers which can replace single use plastics. This will simultaneously reduce the amount of plastic being used and reduce the amount of waste produced by the poultry industry. Peter's aim is to create products with a completely sustainable lifecycle that will not cause any further damage to the environment.



Winner – Forest Track: Peter Gilleece, Mechanical Engineering.

Elizabeth Gilligan's business innovation is Material Evolution, which redesigns waste to create new materials. The first product is a Bio-receptive concrete which can sustain plant growth. Concrete is the second most used material in the world after water. It equates to 8% of our global CO2 emissions. Material Evolution's concrete is made from 90% recycled materials, resulting in an up to 85% reduction in concrete's carbon consumption.



Winner – Material Evolution: Elizabeth Gilligan, PhD Candidate and Thesis Co-Supervisor in both Structural and Environmental Engineering.

UNIVERSITY OF EXETER Elevate



Elevate is an entrepreneurial competition supporting students to develop innovative ideas that benefit the UK's economy and society. The competition supported students enrolled on engineering degree programmes to enable them to explore business innovation beyond project-based learning. Contestants were immersed in the world of business, attended business and entrepreneurship workshops, and received one-to-one business development meetings. These resources meant that regardless of background knowledge, engineering students, from budding entrepreneurs to seasoned professionals, were supported throughout the competition and afterwards. The university awarded prizes based on the level of funding that would help the winners with their next stage of development.

The joint first prize award went to the BioSmart project which is supported by Enactus Exeter which works with remote rural communities, like Kadzinuni in Kenya, to make and sell sustainable biofuels. Its projects generate revenue from sales of biochar, while making use of crop harvest waste and reducing reliance on expensive and restricted energy sources. The team was awarded a £1,000 EIB prize.



Joint First Prize Winner – Plantara Team: team leader, Alvira Kumar, MEng (Hons) Mechatronic Engineering and Jeremy Funk, MEng (Hons) Chemical Engineering, who received the award on behalf of the Plantara Team.

Research carried out by the PETexe Team members enabled them to create innovative new technology from which they have developed a washing machine 'smart filter'. The filter uses enzymes to tackle microplastic waste from laundry, preventing the plastic fibres, which are shed by synthetic clothing during washing, from entering water systems. PETexe was awarded a £750 EIB prize.



Winner – PETexe: Engineering Students, Rachael Quintin-Baxendale, Jonathan Bailey, John-Felipe Murphy, and Jonathan Elliott; Biosciences Students, Dragos Dumitrescu and Jessica Billington; Physics & Astronomy Students, Chloe Matthews and Ceilidh Welsh; Computer Science Student, Adriano Matousek and Natural Sciences Student, Lydia Pike.

The Aksie Team was awarded a £500 EIB prize for the development of a student friendly online platform that will prioritise environmentalism over industry standard booking fees when purchasing tickets and society memberships online.



Winner – Aksie Team: Tom Trow, Economics Student; Sanmarie Grobler, Liberal Arts Student (pictured) and George Elysee, Engineering Student.

UNIVERSITY OF EXETER (continued)

Elevate



George Seymour, the inventor of FastClimb, was awarded a £250 EIB prize. George hopes to develop FastClimb sensor technology for precise measurement in the competitive sport *speed climbing*. A new and growing sport lined up for its debut in the next Olympic Games, FastClimb is looking to capitalise on speed climbing's growing popularity as climbers look to increase their competitive edge.



Winner – FastClimb: George Seymour, Engineering Student.

“ *This is the second year that the University of Exeter has run the Elevate competition, funded by Engineers in Business. Last year one of our contestants, Duncan Lyster, attended the 2019 final where he was runner-up with his sustainable surfboard start-up, Lyster Surfcraft. Duncan's success, along with our new Engineering & Entrepreneurship programme, made this year's competition even more popular with engineers across all disciplines and year groups. The competition has improved the professional development of students involved, boosting their inter-disciplinary knowledge across numerous sectors of engineering, science, and business.* ”

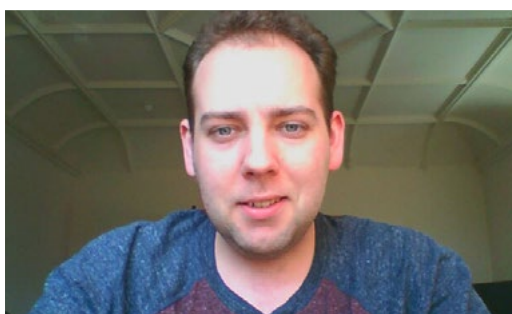
Ceri Howell, Associate Lecturer Engineering with Entrepreneurship at the University of Exeter

ABERYSTWYTH UNIVERSITY

InvEnterPrize Student Ideas Competition



Engineers in Business supported Aberystwyth University's InvEnterPrize Student Ideas Competition for the first time. InvEnterPrize is run in conjunction with the Alumni Office which donates a £10,000 prize fund, which is enhanced with the EIB funding to stimulate participation from students and graduates from the Departments of Computer Science, Maths and Physics. The £3,000 prize was awarded to Rob Barry, creator of Mwnci, a business that will support small and medium sized businesses to manage their data.



Winner: Rob Barry, MSc in Data Science, Creator of Mwnci.

“ *Having the EIB fund as part of our annual InvEnterPrize competition enabled us to use the £3,000 to boost interest in ideas generation and new business start-up in our Departments of Computer Science, Maths and Physics, disciplines with tremendous potential for innovation but departments from which interest in the competition has always lagged behind. As our first winner of the EIB section of InvEnterPrize, we will be using Rob Barry's story to further promote engagement in our competition in future years.* ”

Tony Ormes, Careers Consultant, Law, Criminology, History, Interpol & Enterprise

UNIVERSITY OF SUSSEX Global design challenge



The Global Design Challenge (GDC) module is compulsory for all first-year students studying Engineering, Informatics, and Product Design at the School of Engineering and Informatics, and students from the International Study Centre. Around 400 students working in interdisciplinary teams of five members tackled real-world sustainable development problems.

The winning group was awarded an £1,100 EIB prize for the idea of making solar panels from recycled products. This would employ wooden pallets as frames, old plastic bottles as the elements with aluminium cooking foil as the reflective elements behind them. The storage tank was placed higher than the panel so that the heated water would circulate by the thermo-syphon principle and there would be no need for a pump.



First Prize Winners: Max Lowrie, Computing for Digital Engineering; Jimmy-Luca Medici-Wainwright, Mechanical Engineering with Robotics; Professor Jonathan Bacon, the Head of School, Engineering & Informatics; Isaac Baldwin, Computer Science; Ben Robinson, Computer Science and Artificial Intelligence.

“ *The Engineers in Business prize fund for this year’s Global Design Challenge was vital to the way we organised the module at Sussex. More importantly, it encouraged the students to develop relevant skills such as integration of social, environmental and economic sustainability into the product design process, and to understand the importance of community consultation and involving users for the evaluation of products and designs.* ”

Dr Blay Whitby, Module Convenor,
University of Sussex

The second-place winners proposed a digital solution to reduce waste for which they were awarded a £600 EIB prize. The idea is to let the community share and increase knowledge about the lifecycle of waste and how it can be recycled. This was deemed innovative as digital solutions and waste are not normally thought of together. It also puts local people at the centre of the solution, rather than dropping in technology from outside.



Second Prize Winners: Nauris Kalnins, Computer Science and Artificial Intelligence; Professor Jonathan Bacon, Head of School, Engineering & Informatics and Joshua Harris, Computer Science.

Awarded a £340 EIB prize, the third prize winning team designed a concept for a portable composting toilet and costed two options – a factory-built version for £380 and a DIY version for 62% less.



Third Prize Winners: Reece Sanyaolu, Electrical and Electronic Engineering; Professor Jonathan Bacon, Head of School, Engineering & Informatics and Joe Todd, Computer Science and Artificial Intelligence.

LANCASTER UNIVERSITY Engineering Module Business Development Project



Lancaster University awarded four prizes for the most outstanding ideas that emerged from its recent Engineering Module Business Development Project: The module covers a range of topics in student entrepreneurship, innovation, idea information including generation, business planning, marketing, presenting and pitching, using tools such as the Business Model Canvas, and various external and industrial speakers to supplement and reinforce the taught theory.

Joint First Prize Winners, The Plantara Team received its £1,000 EIB award for developing Thorn, a sensor-based detector for optimising soil management and plant growth.



Joint First Prize Winner – Plantara Team: team leader, Alvira Kumar, MEng (Hons) Mechatronic Engineering and Jeremy Funk, MEng (Hons) Chemical Engineering, who received the award on behalf of the Plantara Team.

TABS is a subscription-based service that provides a network of sensors for data collection and analysis in the building management sector which allows clients to monitor and optimise every aspect of their building through an online dashboard. The TABs team was also awarded £1,000.



Joint First Prize Winner – TABS Team: Alex Cartwright, MEng (Hons) Electronic and Electrical Engineering and Robert Fairclough, MEng (Hons) Mechanical Engineering, received the award on behalf of the team.

Awarded a £500 EIB prize, Build-A-Difference is an online community-based DIY website that provides DIY hobbyists, enthusiasts and beginners with useful step-by-step guides (how to build it, tools and materials needed), photos and videos to help build DIY projects. Build-A-Difference will provide access to all the support, information and tools required.



Joint Second Prize Winner – Build-A-Difference: Josh Robert, MEng (Hons) Mechanical Engineering with the certificate which he received on behalf of the team.

“ The financial support made available from Engineers in Business adds a healthy air of competition between the groups participating in the Business Development Project Module, and inspires the students to do well. With so many groups this year, and with the quality of the ideas proposed and presented being of a high quality, it made the assessment and final decisions on the award of funding a really difficult task – but that’s a nice problem to have. We’re now keen to see the winning groups develop their ideas further and represent Lancaster University for the first time at the Champion of Champions Grand Final. ”

Dr Allan Rennie, Professor at Lancaster University’s Engineering Department

UNIVERSITY OF SOUTHAMPTON SEED Start-Up Funding Competition



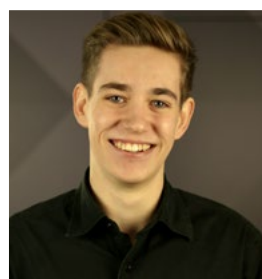
The University of Southampton's SEED Start-Up Funding Competition supports students in the creation and development of early stage businesses or social enterprises through the awarding of funding prizes. Students submit business plans and video pitches before being shortlisted to pitch in front of a panel of judges. The Engineers in Business prize has been integrated into the SEED Fund to engage more engineers and students with engineering-related business ideas to develop their own start-up business. Students from specific and relevant engineering modules are also able to apply via their coursework assignments, offering an innovative approach to reaching out to more students with the opportunity.

Devon Lewis was awarded a £1,500 EIB prize for his start-up business, Inpulse which is developing smart clothing that increases strength and corrects muscle imbalances for any sports person. By continuously monitoring movements of the body, Inpulse clothing can identify inefficient muscle activity and make corrections in real time without any need for user input or professional supervision.



First Prize Winner – Inpulse: Devon Lewis, Final Year PhD Student, Neuroscience, and Founder of Inpulse.

A £1,000 Engineers in Business Prize was awarded to Til Jordan and Andrius Matšenas who co-founded Arwin. The start-up is developing a water monitoring device which attaches to the water flow under sinks. Arwin alerts people to any contamination in real time and in some cases can inform local authorities so they can take the appropriate measures, so reducing health issues, while being convenient and sustainable. The USA has more than 9 million tap water quality violations yearly, specifically in places like Flint, Michigan, where drinking water pollution has affected multiple generations.



Second Prize Winner – Arwin: Til Jordan, First Year Computer Science Student and Co-Founder.

A £500 EIB prize was awarded to Team Eurobot which produces cheap, bespoke robots for schools to encourage students to take an interest in robotics and engineering. The idea was based on their work on the Eurobot Team Project for their University of Southampton class, Systems Design and Computing. The overall objective of this project was to design, build, programme and test an autonomous mobile robot as an entry to the Eurobot 2020 competition, which was sadly cancelled due to COVID-19.



Third Prize Winner – Team Eurobot-E8: Ryan Chung, Ong Joo Yuen, Peter Lappas, and Aayush Jain, all Second Year Engineering Students.

“ *The Engineers in Business prize is an incredible opportunity for our students. While the EIBF fund is available to all students with engineering business ideas through our SEED Fund Competition, an additional application route has been made available to engineering students from a specific module, which has encouraged much greater diversity in applications and has raised greater awareness of the opportunity.* ”

Sarah Rogers, Head of Student Enterprise,
University of Southampton

LONDON SOUTH BANK UNIVERSITY The Mayor's Entrepreneurs Competition



LSBU supports student applications to The Mayor's Entrepreneurs Competition (TMEC). TMEC is a prestigious competition to demonstrate a combination of engineering and entrepreneurial excellence. Despite numerous applications, the Engineering School had not yet had an applicant get into later stages of the competition. To rectify this an embedded programme introducing Enterprise to Engineers has been developed, supported by the Engineers in Business Prize Fund. The goal is to support as many good quality applications as possible to go into The Mayor's Entrepreneurs Competition.

Gold Award Winner, ECO Threads was awarded a £600 EIB prize. The team is turning discarded cigarette butts into eco-friendly and sustainable clothing. ECO Threads is helping to solve the environmental issues caused by littering cigarette butts. By collecting discarded cigarette butts and converting the toxic acetate fibre and rayon into sustainable clothing, the team hopes to educate consumers on the dangers of cigarette butt waste, whilst creating a sustainable fashion brand.

The Silver Award of a £400 EIB prize went to the Photo-Filter Team which has created a device to retrofit onto vehicles (buses initially) that purifies air and produces clean energy.

The Bronze Award of £400 was presented to the Smart Socket Team which developed a smart socket that avoids strain on the national grid and reduces wear on appliances. By communicating with the National Grid and controlling when the equipment plugged into it is on or off, the aim is to prevent high energy home appliances being used at peak times and to spread the load on the grid over a longer period of time.



Gold Award Winner – ECO Threads: Aysha Golam, BEng (Hons) Mechanical Engineering; Michaela Henry, BEng (Hons) Mechanical Engineering; Gowsica Pushpanathan, BEng (Hons) Mechanical Engineering; Yusuf Yusuf, BEng (Hons) Mechanical Engineering.



Silver Award Winner – Photo-Filter: Alessio Corso, Senior Lecturer, Head of Division: Mechanical Engineering and Design at LSBU; Giovanni Cornaglia, MEng (Hons) Mechanical Engineering; Daniel Leo, BEng (Hons) Mechanical Engineering; Ivailo Nedelchev, BEng (Hons) Mechanical Engineering and Karthikeyan Theivendrasa, BEng (Hons) Mechanical Engineering.

“ This has been the most collaborative project that I have ever been involved in. Working with the support from LSBU's Enterprise team and Engineers in Business has really helped to motivate and inspire our talented and diverse students. Our engineering programmes at LSBU understand the importance of incorporating real-world challenges and entrepreneurship skill sets into our curriculum. The funding provided by EIB helped us to spark a real passion for entrepreneurship in our students and nurture problem identification skills at an early stage in their career. ”

Alessio Corso, Senior Lecturer, Head of Division: Mechanical Engineering and Design

ENGINEERS IN BUSINESS CHAMPION OF CHAMPIONS FINAL 2020

On 26 October over 300 viewers from around the world tuned in to our EIB Champion of Champions Final when 10 university teams comprising engineering undergraduates, graduates and postgraduates pitched business innovations in the hope of winning a share of the £10,000 EIB Champions prize fund. Over 3,000 engineers participated in their university competitions and the Champion of Champions Final was the culmination of that effort. The awards presentation was hosted online by Engineer and TV Presenter Kate Bellingham, who superbly guided contestants through the spotlight of the live online show. The teams did a tremendous job, pitching their ideas and answering challenging questions from the four judges: Head Judge, SMF Henning von Spreckelsen; Ana Avaliani, Associate Director, Enterprise, at the Royal Academy of Engineering; Steve Cleverley, CEO of Oxentia Limited and Gareth Trainer, Chair, Enterprise Educators UK.



EIB Champion of Champions Winners with host Kate Bellingham



*Henning von Spreckelsen –
Director and Investor in Plasticowood*



*Professor Rob Carroll, Director,
Catapult Ventures Group*



Chirag Shah, Executive Chairman, Simfoni

This year we had two categories of participants: Big Ideas, for younger students who wished to express their potential to tackle a big problem by combining business and technology, whilst the Start Up category was for those who started or hoped to start, a new company.

Interspersed throughout the event were talks from entrepreneurs, with Judge Henning von Spreckelsen up first. A serial entrepreneur, Henning had many interesting stories to tell and spoke about how he turned around a failing business and put it back on the road to profit.

Our next guest speaker was SMF Chris Hughes, who recently started a business producing Wilfred's Aperitif, a non- alcoholic aperitif. After two months on the market, Wilfred's won a Great Taste Award and sales were going well. Chris told the audience

the story of his entrepreneurial journey; how he turned an idea into an award-winning drink.

The next speaker was Professor Rob Carroll, an experienced investor and founder of Catapult Ventures. Rob is also a professor at Nottingham University Business School. Rob told the audience how to secure first round funding and how to attract a business angel.

Next came Sainsbury Management Fellow Chirag Shah, "zooming in" from Dubai. Chirag is a serial entrepreneur who has founded and exited several businesses in a variety of sectors and countries. He is also a Professor of Entrepreneurship at INSEAD Business School. In a very engaging presentation, Chirag shared with us his five secrets for success when starting a business.

*Chris Hughes –
Founder, Wilfred's
non-alcoholic
British Aperitif*



After what was described as “very difficult” deliberations, the judges revealed their winners:

FOR THE BIG IDEAS CATEGORY:



Big Ideas First Prize Winners – Isin Surekcigil and Manuel Grincho from the University of Surrey

First Prize of £3,000 went to SimSurgeon, from the University of Surrey for the development of software that can be used for virtual reality training of surgeons and medical professionals. The Audience Vote (live show vote) prize of £500 was also won by Team SimSurgeon.



Big Ideas Runner-up Prize Winners – Izzy Zillig, Zain Shaikhand and Harriet Needham from the University of Exeter

The Runner-up Prize of £1,500 was awarded to BioSmart, from the University of Exeter. Their project involves working with remote rural communities to make and sell sustainable biofuel.

FOR THE START UP BUSINESS CATEGORY:



Start Up First Prize Winner – Jonathan Elliot representing Team PETexe

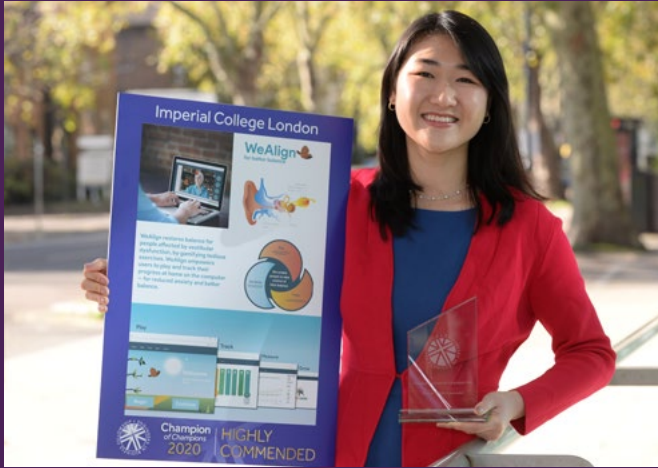
First Prize Winner of £3,000 was PETexe, from the University of Exeter, for the creation of a smart filter that will prevent plastic fibres, that shed from synthetic clothing in washing machines, from entering water systems.



Start Up Prize Runner-up – Devon Lewis from the University of Southampton

The Runner-up Prize of £1,500 was given to Inpulse, from the University of Southampton. Devon Lewis created smart clothing that increases strength and corrects muscle imbalances for use in both healthcare and sports sectors.

HIGHLY COMMENDED



WuQing Hipsh from Imperial College London

WeAlign, from Imperial College London was highly commended for the creation of games for people with balance problems caused by inner ear and brain problems. The games are exercises which help restore balance.

PRE-SHOW PEOPLE'S PRIZE



Ammerul Aiman Shahizam, Jack Maskell, Conor Cullen and Kane Dervan from the University of Sheffield

SeedSense, from the University of Sheffield won £500 in the pre-event People's Vote for the creation of autonomous robots to monitor soil and plant conditions.

“ *The ten finalists were selected from a larger group of entrants from 27 universities into the Champion of Champions final earlier this year. The standard of all the entries was so incredibly high that it was hard enough selecting the finalists, let alone the Champions! It was a privilege to judge such a diverse and inspiring range of ideas from talented young people who are looking to solve real problems in society. All the competitors in this year's final were outstanding and tribute must also go to their professors and enterprise managers who are spearheading innovation education within universities.* ”

Head Judge, SMF Henning von Spreckelsen

EIBF also wishes to thank the sponsors of the Champion of Champions Competition:

- **Purple CV** provided personal CV packages to the winners.
- **CUP (Cambridge University Press)** provided copies of the book Digital Innovation and Entrepreneurship.
- **IPSE (Association of Independent and Self Employed)** provided business support packages to the winners.
- **CABS (Chartered Association of Business Schools)**, a long-term supporter of Engineers in Business Fellowship helped to spread the word about the Engineers in Business Competition.

ENGINEERS IN BUSINESS FELLOWSHIP
A COMPANY LIMITED BY GUARANTEE

TREASURER'S REPORT FOR 2020/21



SUMMARY

The Charity ended the year with a surplus of income over expenditure of £22,113 (2020: £382,643). Net Assets at the end of the year were £2,127,925 (2020: £2,105,812). The value of the Expendable Endowment Fund stands at £2,084,493 (2020: £1,909,016).

Given that the Endowment increased by £204,574, this represents a decrease in other Net Assets of (£182,461): this was a planned reduction following the build up of funding during the 2019/20 financial year resulting from the effects of the initial pandemic restrictions as well as the slower than budgeted increase in the Engineers in Business Competition.

The negative balance in the Restricted Funds is a result of the award of an extra scholarship last year: this has been covered from Unrestricted Funds and will be recovered in 2021/22 when only nine scholarships will be awarded.

INCOME

Income sources were donations and subscriptions. Total income for the year was £906,447 (2020: £1,252,673).

DONATIONS

The major source of our income continues to be from The Gatsby Charitable Foundation, of which Lord Sainsbury of Turville is the patron, who contributed £715,000 in donations this year.

EXPENDITURE

During the year expenditure increased by 1.6% year-on-year from £870,031 to £884,333. This was driven by an overspend of £50,000 as 11 scholarships were awarded in the year (rather than the budgeted 10) offset by underspend in general activities resulting from Covid pandemic-related restrictions, such as the cancellation of the Annual Dinner and all face-to-face roundtable events.

OTHER

Engineers in Business Fellowship's income for the year was just under £1million, meaning that we are not strictly required by the Charity Commission to have our accounts formally audited. However, income was over £1million last year and is anticipated to be over £1million again next year. The accounts for the year just finished will therefore be subject to a statutory audit by a regulated auditor, which will be submitted to Companies House and to the Charity Commission before the relevant deadline.

NEXT YEAR

The Trustees have budgeted for a rebound in expenditure next year as activities resume following the anticipated relaxation of pandemic-related constraints: these will include further expansion of the Engineers in Business Competition, the return of the Annual Dinner, and various in-person roundtable and other events. This will be offset by awarding only nine scholarships, offsetting the extra scholarship awarded in the year just finished.

The mid-term funding of EIBF has been secured with a new three-year agreement with The Gatsby Charitable Foundation covering the years 2021/22 through 2023/24.

Our forecasted expenditure for 2021/2022 is approximately £1,032,000 funded primarily through continuing donations from Gatsby, and subscriptions.

Adam Bazire
Treasurer

Charity Registration No. 1147203
Company Registration No. 07807250

PROFIT AND LOSS

ENGINEERS IN BUSINESS FELLOWSHIP FOR THE YEAR ENDED 31 MARCH 2021

	2021	2020
TURNOVER	£	£
Donations – Expendable Endowment Fund	153,506	265,441
Donations – Restricted	550,000	779,481
Donations – Unrestricted	165,000	152,000
Other Income – Endowment	21,926	52,257
Other Income – Restricted	407	202
Other Income – Unrestricted	15,608	3,292
Total Turnover	906,447	1,252,673
COST OF SALES	£	£
EIB Competition Prizes	58,890	56,512
Grants	550,000	500,000
Total Cost of Sales	608,890	556,512
Gross Profit	297,558	696,161
ADMINISTRATIVE COSTS	£	£
Advertising & Marketing	20,988	9,369
Audit & Accountancy fees	4,113	9,506
Bank Fees	213	2,303
Communications	89,291	99,977
Employers National Insurance	3,873	4,716
Employer's Pensions Costs	3,292	3,219
Other Costs	1,644	4,115
Photography and Video	19,358	23,459
Printing – Other (inc photocopying)	4,203	3,124
Professional Fees	6,221	11,604
Publications	420	1,078
Repairs & Maintenance	65	–
Scholarship and Prize Administration	43,854	37,607
Software and Online Services	2,325	2,020
Staff Costs	65,836	64,545
Telephone & Internet	538	1,050
Travel & Subsistence	868	5,381
Venue hire	3,909	25,947
Website Development	4,434	4,499
Total Administrative Costs	275,444	313,519
Surplus for the year	22,113	382,643

BALANCE SHEET

ENGINEERS IN BUSINESS FELLOWSHIP FOR THE YEAR ENDED 31 MARCH 2021

	2021	2020
CURRENT ASSETS	£	£
Investments	2,020,847	1,890,742
Cash at bank and in hand	115,683	223,603
Prepayments and accrued income	234	15,201
Total Current Assets	2,136,764	2,129,547
CREDITORS – Amounts falling due within one year		
Creditors – Amounts falling due within one year	8,839	23,735
Total Creditors	8,839	23,735
Net Current Assets (Liabilities)	2,127,925	2,105,812
Total Assets less Current Liabilities	2,127,925	2,105,812
Net Assets	2,127,925	2,105,812
CAPITAL AND RESERVES		
Current year earnings	22,113	382,643
Retained earnings	2,105,812	1,723,169
Total Capital and Reserves	2,127,925	2,105,812
FUNDS		
Unrestricted funds	55,874	1,372
Endowment funds	2,084,494	1,879,920
Restricted funds	-12,443	224,520
Accumulated Fund Carried Forward	2,127,925	2,105,812

FUTURE EVENTS

Networking is one of the most valuable assets of becoming part of the SMF Group. To make the most of being an SMF, please join us for our exciting events which are scheduled in 2021:

BUSINESS EDUCATION CLINIC FOR ENGINEERS

Wednesday 16 June 2021, 5pm

Zoom

EIB CHAMPION OF CHAMPIONS FINAL

Monday 25 October 2021

Venue to be announced

EIBF ANNUAL GENERAL MEETING

Monday 1 November 2021

Venue to be announced

SMF ANNUAL CHRISTMAS CURRY NETWORKING EVENING

Wednesday 8 December 2021, 7pm

Millbank Spice Restaurant
34-38 Vauxhall Bridge Road
London SW1V 2RY

Email cathy.breeze@smf.org.uk to book your place in advance for the events above.

Details of the SMF events are published on the SMF website.



SMFs Chris Hughes, Max Fieguth and Samarth Sharma at the Annual Dinner in May 2019



Adam Bazire, Philippa Dickenson, David MacGeehan and Robin Jones at the EIB Champion of Champions Final in October 2019



SMFs Baltazar Lam and Stephen Sheridan at the Investor and Finance Event in March 2020





The Sainsbury Management Fellows – Engineers in Business Fellowship

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