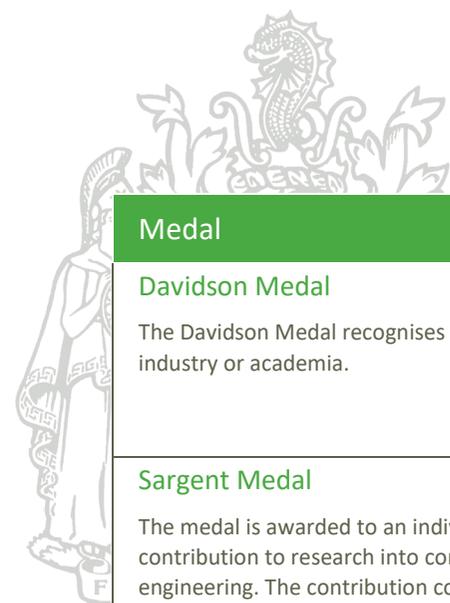


# IChemE Medals and Prize Winners 2020

Medal	Winner	Winning paper/supporting information
<p><b>Ambassador Prize</b></p> <p>The Ambassador Prize is awarded to a volunteer who has made exceptional contributions, likely within an IChemE Special Interest Group, Members Group or as an ambassador for the Institution and/or profession more widely. This prize is typically awarded in recognition of a sustained period of work on a short to medium term project.</p>	<p><b>Professor Geoffrey Maitland</b> FEng CEng CSci FICHEM</p>	<p>Well evidenced excellent contribution and impact.</p>
<p><b>Greene Medal</b></p> <p>The Greene medal is awarded every year to an individual who has made a highly commendable long-term contribution to the progress of IChemE.</p>	<p><b>Professor Michael Cloke</b> CEng FICHEM</p>	<p>The contribution of Professor Cloke over 30 years has been immense in all three areas cited. An excellent candidate.</p> <p>Strong contribution to core membership function.</p>
<p><b>Nicklin Medal</b></p> <p>The Nicklin Medal is an early careers award and was introduced in 2014 to recognise talented chemical engineering researchers.</p> <p>Nominees must, at the time of the awards nomination deadline, have no more than five years postdoctoral research experience and should have produced international quality research outputs.</p>	<p><b>Dr Fenwang Li</b></p>	<p>Dr Li, a candidate from Australia, is awarded the Nicklin Medal for outstanding work on catalysis and his patented it/nature paper. Impressive publication record and impact given that only three years passed since PhD. Important area of energy and catalysis.</p>
<p><b>Sharma Medal</b></p> <p>The medal is presented to an individual who has, across their career, made a significant contribution to the field of chemical engineering research. The judging committee will consider the following: originality and impact of research, innovation, professional standing, and other indicators of esteem indicated by the nominee/nominator.</p>	<p><b>Professor Paula Mendes</b> CSci FICHEM</p>	<p>Very strong nomination, well evidenced impact in an important area. The nomination shows that Professor Mendes is an outstanding candidate for the Sharma Medal.</p>



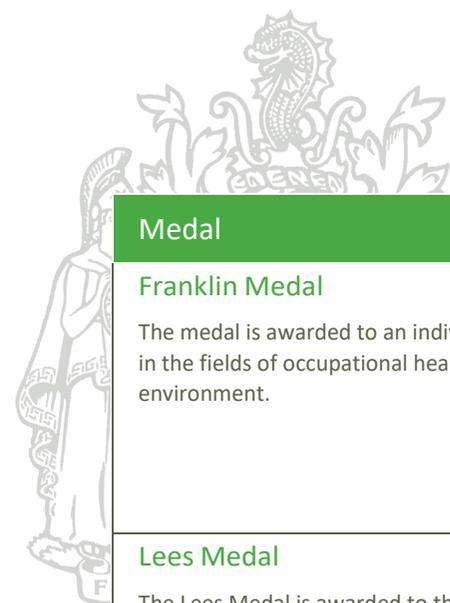
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<b>Davidson Medal</b> The Davidson Medal recognises individuals who have been active mentors in industry or academia.	<b>Dr William Herron</b> CEng CSci FICHEM	Dr Herron has a life-long dedication to mentoring which must have had a significant impact on numerous individuals, as well as on his own organisation, and on other organisations.
<b>Sargent Medal</b> The medal is awarded to an individual who has made a significant recent contribution to research into computer-aided product and process engineering. The contribution could encompass, but need not be limited to, a concept that has promoted much interest, the solution of an unsolved problem, new methods/tools leading to innovative processes/products, or a significant advance of the state of the art within the area of process systems engineering.	<b>Professor Rafiqul Gani</b> FICHEM FAICHE	Professor Gani is an internationally recognized leader in process systems engineering (PSE) and sustainability. He has been a pioneer in chemical product design and process synthesis, thereby contributing to the sustainable development of the chemical industry. His seminal contributions in research and education, together with long track record of publication, collaboration, and leadership, have had a major impact in chemical engineering at large. An outstanding candidate who is highly deserving of the Sargent Medal.
<b>Warner Prize</b> The Sir Frederick Warner Prize will be presented to an individual, normally in the early stages of their career, who has shown exceptional promise in the field of sustainable chemical process technology, nuclear technology or in making chemical engineering more accessible to a wider scientific community.	<b>Dr Salvador Eslava</b> AMICHEM	The panel unanimously recommend Dr Eslava for this year's Warner Prize.
<b>Underwood Medal</b> The medal will be awarded to an individual from academia or industry who has made a significant sustained recent contribution to research, in the area of separations.	<b>Professor Huanting Wang</b> FRSC	The panel recommends Professor Wang of Monash University, Australia as the winner of the Underwood Medal. Professor Wang's work, in the area of membrane separation, and nanomaterials has been sustained, scientifically pioneering, and has had significant industrial impact, within and beyond Australia. The research findings and inventions support provision of clean water and sustainable industrial development.



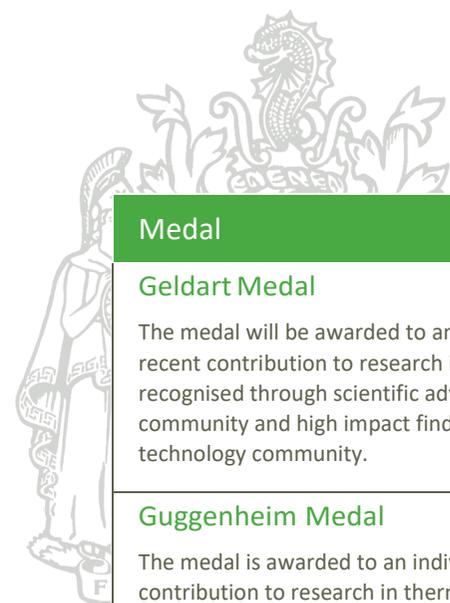
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<p><b>Senior Moulton Medal</b></p> <p>The Senior Moulton Medal is awarded to the author, or authors, of the most meritorious paper published by IChemE during the last year.</p>	<p><b>Dr John Pérez-Calderón</b></p> <p>Centro de Investigación y Desarrollo en Criotecnología de Alimentos CIDCA (UNLP- CONICET-CIC), Argentina</p> <p><b>Ms María Victoria Santos</b></p> <p>Instituto Andino Patagónico de Tecnologías Biológicas y Geoambientales (IPATEC) CONICET, Argentina</p> <p><b>Dr Noemí Zaritzky</b></p> <p>Universidad Nacional de La Plata, Argentina and Centro de Investigación y Desarrollo en Criotecnología de Alimentos CIDCA (UNLP- CONICET-CIC), Argentina</p>	<p>For their paper published in <i>Food and Bioprocess Processing</i>, 2019, 118, 114–129.</p> <p>A very nice example of classical chemical engineering applied to a complex food problem. In this case, the production of precooked frozen brussels sprouts. The paper brings together sophisticated modelling with challenging experimental work. It is well written and serves as a reminder of how the principles of heat transfer apply to a wide range of materials.</p>
<p><b>Junior Moulton Medal</b></p> <p>Joint Award</p> <p>The Junior Moulton Medal follows the same criteria but recognises the best author, or co-author, who has graduated within the last ten years (excluding career breaks) at the time of submission of the paper.</p>	<p><b>Dr David Danaci</b></p> <p>Imperial College London, UK</p> <p><b>Dr Mai Bui</b></p> <p>Imperial College London, UK</p> <p><b>Dr Niall MacDowell</b></p> <p>Imperial College London, UK</p>	<p>For their contribution to the paper published in <i>Molecular Systems Design and Engineering</i> 2020, 5, 212–231.</p> <p>Exploring the limits of absorption-based CO<sub>2</sub> capture using MOFs with PVSA – from molecular design to process economics.</p>
<p><b>Junior Moulton Medal</b></p> <p>Joint Award</p> <p>The Junior Moulton Medal follows the same criteria but recognises the best author, or co-author, who has graduated within the last ten years (excluding career breaks) at the time of submission of the paper.</p>	<p><b>Mr Luke Forster</b></p> <p>The University of Manchester, UK</p> <p><b>Dr Carmine D’Agostino</b></p> <p>The University of Manchester, UK</p> <p><b>Mr Le Yu</b></p> <p>The University of Manchester, UK</p>	<p>For their contribution to the paper published in <i>Molecular Systems Design and Engineering</i> 2020 5, 1193–1204.</p> <p>Tailoring morphology of hierarchical catalysts for tuning pore diffusion behaviour: a rational guideline exploiting bench-top pulsed-field gradient (PFG) nuclear magnetic resonance (NMR).</p>



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<p><b>Hanson Medal</b></p> <p>The Hanson medal is awarded to the author or authors of the best article to appear in <i>The Chemical Engineer</i> magazine each year.</p>	<p><b>Anonymous</b></p>	<p>For their article, <i>A Visible Career on the Spectrum</i>.</p> <p>This article, published anonymously, offers a personal experience of autism in the workplace. The article is well-referenced, grounded and has a solid framework.</p> <p>A lot of time and thought has clearly gone into the preparation of this article. A very deserving winner of the Hanson medal. The committee recognise and thank the author for sharing this experience.</p>
<p><b>Hutchison Medal</b></p> <p>The Hutchison Medal is awarded for both practical and wide-ranging, philosophical, or thought provoking published papers.</p>	<p><b>Syed Ali Mehdi Naqvi</b> University of Oklahoma</p> <p><b>Muhammad Raza</b> University of Engineering &amp; Technology, Lahore, Pakistan</p> <p><b>Saima Ghazal</b> University of Engineering &amp; Technology, Lahore, Pakistan</p> <p><b>Saeed Salehi</b> University of Oklahoma</p> <p><b>Ziho Kang</b> University of Oklahoma</p> <p><b>Catalin Teodoriu</b> University of Oklahoma</p>	<p>For their paper published in <i>Process Safety and Environmental Protection</i>, 2020, 138, 220–235.</p> <p>This interesting safety-related paper, looking at operator change, was well-liked by the committee. It features a solid theoretical background, sophisticated analysis, and interpretation, and is well-presented.</p> <p>The paper has the potential to be shared and discussed widely as it has clear real-world use. The committee were happy to award the Hutchison Medal to this paper.</p>
<p><b>Clean Energy Medal</b></p> <p>The medal is awarded to an individual in recognition of outstanding service in the field of Clean Energy, including but not limited to mitigation of climate change, reduction of pollutant emission and reducing utilisation of non-renewable feedstocks.</p>	<p><b>Professor Yulong Ding</b> <b>CEng FICHEM</b></p>	<p>Committee unanimously agreed that award of the Clean Energy Medal goes to Professor Ding.</p> <p>Clear contribution over many years, excellent academic research, and excellent commercialisation.</p>



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<p><b>Franklin Medal</b></p> <p>The medal is awarded to an individual in recognition of outstanding service in the fields of occupational health, safety, loss prevention and care for the environment.</p>	<p><b>Dr Phillip Carson</b> MChemE</p>	<p>Dr Carson is recommended as the winner of the Franklin Medal, having made a long-term voluntary contribution to the <i>Loss Prevention Bulletin (LPB)</i> as an author and panel member. The nomination provided plentiful evidence of</p> <p>a volume of good quality articles in <i>LPB</i> covering diverse industry sectors and spanning 35 years. <i>LPB</i> is a highly respected and used publication within and beyond chemical engineering.</p>
<p><b>Lees Medal</b></p> <p>The Lees Medal is awarded to the author, or authors, of the best article on the topic of safety and loss prevention in an IChemE publication.</p>	<p><b>Mr Michael Rantell</b> CEng MChemE</p>	<p>Michael Rantell is recommended as the winner of the Lees Medal. His article '<i>Historical runaway reaction case study (January 1992)</i>' (<i>Loss Prevention Bulletin</i> 273 June 2020) provides a clear description, with clear graphics and analysis, of a runaway reaction and loss of containment incident in a batch process for synthesis of</p> <p>chemical intermediates for pharmaceutical products. The article includes a useful description of, and signpost to, reaction thermal hazard assessment best practice. The article strikes a good balance between self-examination, openness, and forward-looking discussion. The experience described (which we all hope to avoid) is laid out clearly and sensitively, and good practical advice is provided at the end.</p>
<p><b>Donald Medal</b></p> <p>The Donald Medal is awarded to an individual for outstanding services in biochemical engineering.</p>	<p><b>Professor Gary Lye</b> CEng CSci FICHEM</p>	<p>Committee unanimously agreed that the Donald Medal is awarded to Professor Gary Lye.</p>
<p><b>Morton Medal</b></p> <p>The Morton Medal is awarded to the individual who has best demonstrated excellence in chemical engineering education. In particular, it looks to recognise the work of outstanding educators as well as 'game changers', and to promulgate best practice in chemical engineering education.</p>	<p><b>Professor Nicky Eshtiaghi</b></p>	<p>We recommend unanimously that the award be given to Professor Nicky Eshtiaghi for her outstanding efforts in creating creative, adaptive, and inclusive learning approaches that enable diverse chemical engineering</p> <p>students to become successful learners and develop into ethical professionals. This has included use of educational technology as well as engagement of industry. We note the impact her work has generated within her own University as well as her national recognition within Australia and within IChemE.</p>



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<p><b>Geldart Medal</b></p> <p>The medal will be awarded to an individual who has made a significant recent contribution to research in particle technology. This will be recognised through scientific advancements widely acknowledged within the community and high impact findings recognised outside the particle technology community.</p>	<p><b>Professor John Grace</b> OC CEng MIChemE</p>	<p>Unanimously recommending Professor John Grace to be awarded the Geldart Medal. Top scores by all judges. We have a unique and gigantic star amongst the nominations, having been nominated by eight international leaders. This is truly exceptional. He is a great leader in the field that will set an excellent example of prestige for the Geldart Medal.</p>
<p><b>Guggenheim Medal</b></p> <p>The medal is awarded to an individual who has made a significant recent contribution to research in thermodynamics and/or complex fluids. The contribution could encompass, but need not be limited to, new experimental techniques for the study of complex fluids at the molecular, mesoscopic, or macroscopic scale, new theoretical or computational developments for the calculation of thermodynamic properties, and/or developments of new complex fluids of potential interest for technological processes and applications.</p>	<p><b>Dr Carolyn A Koh</b></p>	<p>The committee unanimously agreed that this year's winner of the Guggenheim Medal in all categories is Dr Carolyn A Koh.</p>
<p><b>SIESO Medal</b></p> <p>The SIESO Medal seeks to raise awareness of process safety among science, business, and engineering students. The medal was launched early 2019 following a donation from SIESO (a society called Shared Information and Experience for Safer Operation) who ceased operations in 2018 and bequeathed the bulk of its reserves to IChemE. The medal will be awarded annually to an individual or group of students for the best presentation of a major accident and the learning outcomes. Applications are sought from all students anywhere in the world, including under or postgraduate; full or part time; in chemical engineering or other subjects.</p>	<p><b>Kaloksung Gurung, Laya Jayadeep, Janusz Siwek, Satyam Vora, David Zhou</b> University of Bradford</p>	<p>The Committee unanimously agreed that the team of students from University of Bradford are awarded the SIESO Medal. The entry completely fulfils the stated brief of the competition. By designing a pop-up book that explains the events leading up to the 2005 Texas City explosion, the team have produced a unique way of describing the incident in a way that is easy to understand and memorable. The fact the content is accurate and well argued adds weight and credibility to the submission.</p>