

Nominations for William Begell Medal (2023)

Nominations are solicited for the William Begell Medal (2023) that would be bestowed upon the selected recipient at the 17th International Heat Transfer Conference in Cape Town, South Africa (14-18 August 2023). The nominee should be an

“Internationally-recognized, highly-accomplished researcher and leader in fundamentals or applications of thermal sciences and engineering based on the lifetime achievements”

Award: The Awardee will receive the Begell Medal (sponsored by Begell House), a certificate, and a cash check of \$5,000 (USD) plus \$5,000 (lump sum) against travel costs.

Nomination Package:

- i. Detailed Curriculum Vitae of the candidate,
- ii. Three letters of recommendation from internationally-renowned scientists or engineers in the field
- iii. Two-page summary of the candidate’s lifetime achievements
- iv. Citation paragraph
- v. Support letter from the President/Head of the nominating society

Nominating Societies:

- Assembly for International Heat Transfer Conferences (AIHTC)
- International Centre for Heat and Mass Transfer (ICHMT)
- American Society of Thermal and Fluids Engineers (ASTFE)
- Asian Union of Thermal Science and Engineering (AUTSE)
- EURO THERM Committee (EUROTHERM)

The above societies may nominate one candidate each except the AIHTC which will nominate two candidates. The final recipient will be selected by the Begell Medal Council.

Nomination Deadline: Nominations to the Honours and Awards Committee of ICHMT are due to the ICHMT office, Professor Ilker Tari (ilker@ichmt.org), by April 10. The nomination from ICHMT will be forwarded to the Chair of the Begell Medal Council, Dr. Vish Prasad through the Begell House Website created for this purpose, by April 30, 2023.

Details on the Selection Process, Conditions of Eligibility, and Members of the Medal Council are attached.

William Begell Medal

William Begell Medal is bestowed upon an internationally-recognized, highly-accomplished researcher and leader in fundamentals or applications of thermal sciences and engineering based on the lifetime achievements.

The Awardee will receive a silver cast Begell Medal, a certificate, and a cash check of \$5,000 (USD) plus \$5,000 (lump sum) against travel costs, including airfare, hotel accommodation, conference registration, visa fee, health and any other insurance as The William Begell Medal Award consists of a silver cast medal, a certificate, and a cash check of \$5,000 (USD) plus \$5,000 reimbursable against travel costs to attend the conference.

One Medal will be awarded every four years, which will tentatively coincide with the IHTC Conferences. The Medal will not be awarded in the years if the Begell House management board so decides.

Conditions of Eligibility

- The recipient at the time of selection shall be a living person who is able and willing to be present to receive the Begell Medal at the time and place designated by the Medal Council.
- Once selected by the Begell Medal Council, the medalist shall provide to the Council Chair no later than five days following the announcement of selection; Biography, CV, picture for the websites, and any other information that is deemed necessary by the Council.
- The prospective recipient will agree to present a Begell Medal Lecture on a topic of her/his choice at the Conference where she/he will be awarded the medal.
- The prospective recipient shall also provide an abstract of her/his presentation at the Conference to be included in the announcement of the program in which the Medal will be bestowed.
- The date, time, and session within the conference in which the Medal will be presented shall be determined by the Conference Chair. However, this must be a major event of the Conference.
- The formal award of the Begell Medal shall be made by the BH President, or his/her designee, at such time and place as the Begell Medal Council may designate, and preferably at the IHTC conference.

Selection Process

- The selection of the Begell Medal recipient will be made by the Begell Medal Council.
- Nominations for the Begell Medal can be made electronically to the Chair of the Council via

the BH Website created specifically for this purpose. They should be made at least one year in advance of the date of the Conference/Award venue, or according to the timeline announced by the Council Chair. ICHMT, ASTFE, EURO THERM, and AUTSE may nominate one candidate each for the Medal while AIHTC may nominate two candidates, preferably from regions/countries that are not well represented by the other societies. There shall be a maximum of six nominations for final voting and selection.

- The nominations shall be made by the Presidents/Heads of the respective societies and may be submitted by member(s) on the Council.
- Each nomination package shall consist of a detailed Curriculum Vitae of the candidate, three letters of recommendation from internationally-renowned scientists or engineers in the field, a two-page summary of the candidate's lifetime achievements, a citation paragraph, and a support letter from the President/Head of the nominating society, and any other material(s) that the Begell Medal Council may determine helpful for the review and selection process.
- The websites of AIHTC, ICHMT, ASTFE, EURO THERM, AUTSE, and BH as well as the IHTC will promote the Begell Medal presentation event.
- The final conference program will recognize the Medal event. The conference program shall place in its records a brief biography and a photograph of the medalist; approved by the medalist, and may print them for distribution to engineering societies, libraries, other organizations, and individuals.

Members, William Begell Medal Council

Dr. Vish Prasad, Chair of the Council, Professor of Mechanical Engineering, University of North Texas, Denton, Texas, USA (BH)

Dr. Bing-Yang Cao, Professor and Dean in the School of Aerospace Engineering, Tsinghua University, Beijing, China (AIHTC)

Dr. Pedro J. M. Coelho, Professor and Head of the Department of Mechanical Engineering, Instituto Superior Técnico, Lisboa, Portugal (EUROTHERM)

Dr. Leonid A. Dombrovsky, Chief Researcher, Joint Institute for High Temperatures, Moscow, Russia (ICHMT)

Dr. Josua Meyer, Vice President of AIHTC, Professor, Stellenbosch University, South Africa (AIHTC)

Dr. Stathis Michaelides, Tex Moncrief Chair of Engineering, Texas Christian University, Fort Worth, Texas, USA (ASTFE)

Dr. Taku Ohara, Professor, Institute of Fluid Science Tohoku University, Sendai, Japan (AUTSE)

Society/Organization Represented

BH: Begell House

AIHTC: Assembly for International Heat Transfer Conferences

ICHMT: International Centre for Heat and Mass Transfer (ICHMT),

ASTFE: American Society of Thermal and Fluids Engineers

AUTSE: Asian Union of Thermal Science and Engineering

EUROTHERM: EUROTHERM Committee

Member Biographies

Professor Vish Prasad, Chair of the Council, University of North Texas, USA (Begell House)



Dr. Vish Prasad, currently Professor of Mechanical Engineering at the University of North Texas (UNT), is an internationally-recognized researcher and academic leader. His research has focused on convective heat transfer, heat transfer in porous media, supercritical fluids and heat transfer, energy materials and devices, and advanced materials processing and manufacturing. Dr. Prasad has published over two hundred twenty invited and refereed articles, co-authored four patents, made over two hundred conference/seminar presentations, and organized numerous conferences, symposia, and workshops. He has served on many Editorial Advisory Boards, Editor or Co-editor of several journals and monographs, and a Co-Editor of Springer Handbook of Crystal Growth (1600 pages). Currently, he is the Editor-in-Chief of Mechanical Engineering Series of Springer/Nature and the lead Editor-in-Chief of Annual Review of Heat Transfer (2002-present). Dr. Prasad is also a member of the Board of Directors of the American Society of Thermal and Fluid Engineers (ASTFE) and a Fellow of the American Society of Mechanical Engineers (ASME) and ASTFE.

Dr. Prasad's academic positions include Assistant and Associate Professor of Mechanical Engineering at Columbia University, Professor and Leading Professor of Mechanical Engineering and Professor of Materials Science and Engineering at Stony Brook University, and Distinguished Professor of Mechanical and Materials Engineering at Florida International University (FIU). In the academic leadership role, Dr. Prasad has served as the President of Mody University of Science and Technology (Rajasthan, India), Vice President for Research and Economic Development at UNT, Executive Dean/Dean of Engineering and Computing at FIU, and Associate Dean for Research and Graduate Studies in the College of Engineering and Applied Sciences at Stony Brook. Dr. Prasad has received 2020 Heat Transfer Memorial Award from ASME, 2011 Michael P. Malone International Leadership Award from the Association of Public and Land-Grant Universities (APLU) - the largest organization of the US universities, 2006 Academic Excellence Medal from the Latin American and Caribbean Consortium of Engineering Institutions (LACCEI), and 2005 Distinguished Service Medal for Engineering Education in Latin America from Santa Maria University. Dr. Prasad is the Co-founder and Founding President of LACCEI as well as a Co-founder of Mattoo Center for India Studies at Stony Brook.

Professor Bing-Yang Cao, Tsinghua University, Beijing, China (AIHTC)



Dr. Bingyang Cao is Professor and Dean in the School of Aerospace Engineering, Tsinghua University, China. He is a Fellow of Asian Union of Thermal Science and Engineering, International Association of Advanced Materials, and Engineered Science Society. He currently serves as Delegate to the Assembly for International Heat Transfer Conferences, Secretary General of the Asian Union of Thermal Science and Engineering, Vice-chair of the Thermally Conductive Composite Committee of the Composite Society of China, Member of the Heat and Mass Transfer Society of China, Member of the Combustion and Heat Transfer Committee of the Chinese Society of Astronautics, and Member of the Space Energy Committee of the Chinese Society of Astronautics. Dr. Cao was awarded MOE New Century Talented Scientists Program (2011), Excellent Youth Funding of NSFC (2013), Wu Zhonghua Outstanding Young Scholar Award from China Engineering Thermophysics Society (2014), Outstanding Young Scientists of NSFC (2018), First Prize of Natural Science of MOE (2019), IAAA Medal of International Association of Advanced Materials (2020), Elsevier Highly Cited Researchers (2021, 2022). His main

research areas include micro-/nanoscale heat transport, thermally functional materials, and advanced thermal management technologies. Dr. Cao has published more than 200 SCI-indexed journal papers. He is currently serving as the Editor-in-Chief of ES Energy & Environment (ESP), editorial member of 9 international journals, including Journal of Physics: Condensed Matter (IOP), Scientific Reports (NPG), PloS One (PloS), Materials (MDPI), Advances in Materials Research (KAIST), Energy Storage and Saving (Elsevier), and others.

Professor Pedro J. M. Coelho, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal (EUROTHERM)



Professor Pedro Coelho is Professor and Head of the Department of Mechanical Engineering at Instituto Superior Técnico (IST), University of Lisbon, Portugal. He has more than 100 papers published in international journals, and about 140 papers presented at international conferences. He is co-author of a book on Combustion (in Portuguese) for undergraduate and master students. His research is in the field of numerical simulation of heat transfer and combustion problems. Specific areas of interest are radiation models, turbulence-radiation interaction, computational heat transfer, turbulent diffusion flames, mild combustion and industrial combustion equipment. Dr. Coelho is a member of the Eurotherm Committee for the Advancement of Thermal Sciences and Heat Transfer, member of the Scientific Council, Assembly and Executive Committee of the International Centre of Heat and Mass Transfer, member of the Assembly for International Heat Transfer Conferences and member of the Assembly of the World Conference (AWC) on Experimental Heat Transfer, Fluid Mechanics, and Thermodynamics. He is an associate editor of the Journal of Quantitative Spectroscopy and Radiative Transfer, International Journal of Thermal Sciences, and member of the advisory board of Computational Thermal Sciences, Heat Transfer Research and International Journal of Energy for a Clean Environment. He graduated in Mechanical Engineering in 1984 and received his Ph.D. in 1992 from the Instituto Superior Técnico (IST), University of Lisbon, Portugal.

Professor Leonid A. Dombrovsky, Joint Institute for High Temperatures, Moscow, Russia (ICHMT)



Professor Leonid A. Dombrovsky is a leading expert in the field of radiative transfer in various scattering media, with a focus on power engineering, geophysics, and biomedicine. He currently holds the position of Chief Researcher at the Joint Institute for High Temperatures (Moscow, Russia). Prof. Dombrovsky has published over 300 research papers, as well as several books and book chapters. In 2016, he was awarded [the prestigious A.V. Luikov Medal](#) for outstanding contributions to the science and art of heat and mass transfer. In 2018, he also received the William Begell Medal for his research on levitating droplet clusters. The cooperation of Leonid Dombrovsky with colleagues from Australia, Germany, France, Israel, Russia, Sweden, Switzerland, Great Britain, and the United States during the last 25 years appeared to be especially important in improving the overall skill and enriching the diversity of new physical models. This has been the basis for the advances in many different fields such as heat transfer in rocket engines and solar reactors, thermal processes in nuclear reactors, microwave radiation of foam on the ocean surface, solar heating and melting of snow and ice, properties of porous thermal insulations, shielding of thermal radiation by evaporating or sublimating

particle clouds, managing the droplet clusters, airborne spreading of viruses, and infrared treatment of human tumours. He earned his PhD in 1974 from the Moscow Institute of Physics and Technology (MIPT) and a Doctor of Science degree in 1990.

Professor Josua Meyer, (Vice President, AIHTC), Stellenbosch University, South Africa (AIHTC)



Professor Josua Meyer is serving as a Professor at Stellenbosch University since April 2022. In the past, he was a Professor at the University of Pretoria where also served as the Head of Mechanical and Aeronautical Engineering for 20 years, and Chair of the School of Engineering for 17 years. His research encompasses thermal sciences with focus on heat exchangers, including fundamental work on internal forced convection, transitional flow regimes, nanofluids, boiling, and condensation. On applications sides his work extends to thermal-solar, wind- and nuclear energy. His research group consists of 30 full-time graduate students and 10 staff members. He has received 11 national teaching awards from three different universities, as well as an international award. His [videos](#) on heat transfer on YouTube has been watched more than 1.7 million times. He has won more than 43 research awards including 33 awards for best article of the year or best conference paper. International/national awards were given to 12 of his postgraduate students for the quality of their work under his supervision.

For his research, Dr. Meyer has received many national and international awards, including Thomas Price Award, Rand Coal Award, South African Institute of Mechanical Engineers Medal, LT Campbell-Pitt Award, Literati Award, Chairman's Award of the South African Institute of Air-conditioning and Refrigeration, and Will Stoecker award. He is a member or fellow of various professional institutes and societies such as ASME, ASHRAE, AIAA, and the Royal Aeronautical Society. In 2019, he won the Chancellor's Award for Research for sustained excellent performance, in recognition of exceptional achievement in research and the associated promotion of the University of Pretoria. He is an A-rated NRF (National Research Foundation) researcher; A-rated researchers are unequivocally recognized by their peers as leading international scholars in their respective fields.

Dr. Meyer is an ISI "highly cited researcher" and belongs to the Stanford University's list of top 2% scientists in the world. He is on the editorial board of 13 journals and is editor of 7 journals in his field of research. He has (co)authored more than 800 articles, conference papers, book chapters, and patents and has (co)supervised more than 150 masters and PhD students. He was on the selection committee of the Franklin Institute Awards Programme (one of the world's oldest, since 1824) for the Benjamin Franklin Medal. To date, 117 awards of this institute have been honoured with Nobel prizes. Dr. Meyer currently serves as the Vice President of the Assembly for International Heat Transfer Conferences.

Professor Stathis Michaelides, Texas Christian University, Fort Worth, Texas, USA (ASTFE)



Professor Michaelides is currently the Tex Moncrief Chair of Engineering at Texas Christian University (TCU). In the past, he has served as the Robert F. McDermott Chair in Engineering and the Chair of the Department of Mechanical Engineering of the University of Texas at San Antonio, Founding Chair of the Department of Mechanical and Energy Engineering at the University of North Texas (2006-2007); the Leo S.Weil Professor of Mechanical Engineering at Tulane University (1998-2007); Director of the South-Central Center of the National Institute for Global Environmental Change (2002-2007); Associate Dean for Graduate Studies and Research in the School of Engineering at Tulane University (1992-2003); Head of the Mechanical Engineering Department at Tulane (1990-1992). Between 1980 and

1989 he was on the faculty of the University of Delaware, where he also served as Acting Chair of the Mechanical Engineering Department (1985-1987).

Professor Michaelides holds a B.A. degree (honors) from Oxford University and M.S. and Ph.D. degrees from Brown University. He was awarded an honorary M.A. degree from Oxford University (1983); the Casberg and Schillizzi Scholarships at St. Johns College, Oxford; the student chapter ASME/Phi,Beta,Tau excellence in teaching award (1991 and 2001); the Lee H. Johnson award for teaching excellence (1995); a Senior Fulbright Fellowship (1997); the ASME Freeman Scholar Award (2002); the Outstanding Researcher Award at Tulane (2003); the ASME Outstanding Service Award (2007); the ASME Fluids Engineering Award (2014); the ASME 90th Anniversary of FED Medal (2016); and the ASME Edwin E. Church Medal (2021). Professor Michaelides was a member of the executive committee of the Fluids Engineering Division of the ASME (2002-08) and served as chair of the Division in 2005-2006. Prior to this he has served as chair (1996-1998) of the Multiphase Flow Technical Committee. He served twice as the President of the ASEE Gulf-South Region (1992-93 and 2016-2017). He chaired the 4th International Conference on Multiphase Flows (New Orleans May 27 to June 1, 2001). He has published more than 180 journal papers and has contributed more than 250 papers and presentations in national and international conferences. He has authored/co-authored eight books and is currently editor of the Journal of Non-Equilibrium Thermodynamics.

Professor Taku Ohara, Institute of Fluid Science, Tohoku University, Sendai, Japan (AUTSE)



Dr. Taku Ohara is a professor at the Institute of Fluid Science, Tohoku University in Sendai, Japan. He received his B.Eng., M.Eng., and Dr.Eng. degrees in Mechanical Engineering from The University of Tokyo, Japan in 1986, 1988, and 1991, respectively. After obtaining his degrees, he joined Tohoku University and has been a full professor since 2006. Ohara's research interest is in nano- and molecular-scale heat and fluid flow, molecular thermophysical properties, and interfacial thermal phenomena. His research has been recognized with some awards, including Best Paper Awards from the Japan Society of Mechanical Engineers (JSME) in 1993 and 2009, a Young Investigator Award from the Japan Society of Fluid Mechanics (JSFM) in 2001, and Academic Achievement Awards from the Heat Transfer Society of Japan (HTSJ) in 2004, 2013, and 2019, a Best Paper Award from the Japan Society of Thermophysical Properties (JSTP) in 2011, and an Academic Achievement Award from the Thermal Engineering Division of the JSME in 2011. Ohara is also serving as Secretary General of AUTSE (Asian Union of Thermal Science and Engineering) in 2021-2022, President of JSTP in 2020, Head of the Thermal Engineering Division of JSME in 2021, and currently Executive Board Director of JSME in 2022-2023, Vice President of HTSJ in 2022, Executive Board Member of AUTSE since 2015, and a Scientific Council Member of the International Centre for Heat and Mass Transfer (ICHMT) since 2016. He is also working as an editor of the International Journal of Heat and Mass Transfer since 2019.