MHMT
CONGRESS

PROCEEDINGS OF THE 6TH WORLD CONGRESS ON MOMENTUM, HEAT AND MASS TRANSFER (MHMT 2021)

June 17 - 19, 2021| ~~Lisbon, Portugal~~ - Virtual Conference

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WELCOME MESSAGE FROM THE CONFERENCE CHAIR

On behalf of the International Academy of Science, Engineering and Technology (International ASET Inc.), the organizing committee would like to welcome you to the 6th World Congress on Momentum, Heat and Mass Transfer (MHMT 2021).

MHMT is aimed to become one of the leading international annual congresses in the fields of momentum, heat and mass transfer. This congress will provide excellent opportunities to scientists, researchers, industrial experts, and university students to present their research achievements and to develop new collaborations and partnerships with experts in the field.

While each conference consists of an individual and separate theme, the 3 conferences share considerable overlap, which prompted the organization of this congress. The goal of this undertaking is to bring together experts in each of the specialized fields, and at the same time allow for cross pollinations and sharing of ideas from the other closely related research areas.

We thank you for your participation and contribution to the 6th World Congress on Momentum, Heat and Mass Transfer (MHMT 2021). We wish you a very successful and enjoyable experience.

Dr. Lixin Cheng
Congress Chair and Proceedings Editor
MHMT 2021

Dr. Tassos G. Karayiannis
Congress Co-Chair and Proceedings Editor
MHMT 2021

Dr. Sohel Murshed
Congress Local Chair
MHMT 2021

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ABOUT MHMT 2021

MHMT is aimed to become one of the leading international annual congresses in the fields of momentum, heat and mass transfer. This congress will provide excellent opportunities to the scientists, researchers, industrial engineers, and university students to present their research achievements and to develop new collaborations and partnerships with experts in the field.

There are 3 conferences included in the CSEE Congress:

ENFHT 2021 - 6th International Conference on Experimental and Numerical Flow and Heat Transfer
ICMFHT 2021 - 6th International Conference on Multiphase Flow and Heat Transfer
CSP 2021 - 6th International Conference on Combustion Science and Process

While each conference consists of an individual and separate theme, the 3 conferences share considerable overlap, which prompted the organization of this congress. The goal of this undertaking is to bring together experts in each of the specialized fields, and at the same time allow for cross pollinations and sharing of ideas from the other closely related research areas.

MHMT is an acronym for **M**omentum, **H**eat, and **M**ass **T**ransfer

The proceedings is published in Ottawa, Canada.

All papers were peer-reviewed

The congress proceedings is published under an ISSN and ISBN number

Each paper is assigned a unique DOI number by Crossref

The conference proceedings is indexed by Google Scholar

The proceedings is permanently archived in Portico (one of the largest community-supported digital archives in the world)

Google Scholar Crossref PORTICO

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SCIENTIFIC COMMITTEE

We would like to thank the following for accepting to act as a member of the Scientific Committee for the MHMT 2021 Congress:

Scientific Committee Members for ENFHT 2021

- **Dr. Rayhaneh Akhavan,** University of Michigan, USA
- **Dr. Jalel Azaiez,** University of Calgary, Canada
- **Dr. Arend Dubbelboer,** Danone Nutricia Research, Netherlands
- **Dr. Yanping Du,** Shanghai Jiao Tong University, China
- **Dr. Mohammad Hamdan,** American University of Sharjah, United Arab Emirates
- **Dr. Mohammad Hojjat,** University of Isfahan, Iran
- **Dr. Gamze Gediz Ilis,** Istanbul Okan University, Turkey
- **Dr. Zdeněk Jegla,** Brno University of Technology, Czech Republic
- **Dr. Boo Cheong Khoo,** National University of Singapore, Singapore
- **Dr. Sébastien Poncet,** Sherbrooke University, Canada
- **Dr. Ziad Saghir,** Ryerson University, Canada
- **Dr. Yufeng Yao,** University of the West of England, UK
- **Dr. Marcelo Buffoni,** ABB Switzerland Ltd. Corporate Research, Switzerland
- **Dr. Q. Jane Wang,** Northwestern University, USA
- **Dr. Raya Al-Dadah,** University of Birmingham, UK
- **Dr. Harvey Thomson,** Leeds University, UK

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SCIENTIFIC COMMITTEE

Scientific Committee Members for ICMFHT 2021

- **Dr. Ashley Emery,** University of Washington, USA
- **Dr. Kamiel Gabriel,** University of Ontario Institute of Technology, Canada
- **Dr. Faik Hamad,** Teesside University, UK
- **Dr. Tassos Karayiannis,** Brunel University London, UK
- **Dr. Christos Markides,** Imperial College London, UK
- **Dr. Eckart Meiburg,** University of California at Santa Barbara, USA
- **Dr. João Miranda,** Faculdade de Engenharia da Universidade do Porto, Portugal
- **Dr. Mostafa Safdari Shadloo,** National Institute of Applied Science (INSA), France
- **Dr. Huihe Qiu,** Hong Kong University of Science & Technology, Hong Kong
- **Dr. Jiyun Zhao,** City University of Hong Kong, Hong Kong
- **Dr. Gretar Tryggvason,** Johns Hopkins University, USA
- **Dr. Cem Sarica,** University Tulsa, USA

Scientific Committee Members for CSP 2021

- **Dr. Byungchul Choi,** Chonnam National University, South Korea
- **Dr. Young Choi,** Korea Institute of Machinery and Materials, South Korea
- **Dr. Pedro Jorge Martins Coelho,** University of Lisbon, Portugal
- **Dr. Qinling Li,** Sheffield Hallam University, UK
- **Dr. Lin Ma,** The University of Sheffield, UK
- **Dr. Vahid Motevalli ,** Tennessee Tech University, USA
- **Dr. Guido Saccone,** CIRA – Italian Aerospace Research Centre, Italy
- **Dr. Sergei Sazhin,** University of Brighton, UK
- **Dr. Yannis Hardalupas,** Imperial College of London, UK
- **Dr. Richard Stone,** University of Oxford, UK
- **Dr. Yang Wenming,** National University of Singapore (NUS), Singapore

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KEYNOTE SPEAKERS

The keynote information for the 6th World Congress on Recent Advances in Nanotechnology (MHMT 2021) is as follows:

Dr. Gretar Tryggvason
Johns Hopkins University, USA
ICMFHT 2021 Keynote Speaker

Dr. Christos Markides
Imperial College London, UK
ICMFHT 2021 Keynote Speaker

Dr. Harvey Thompson
Leeds University, UK
ENFHT 2021 Keynote Speaker

Dr. Mohamed Pourkashanian
The University of Sheffield, UK
ENFHT 2021 Keynote Speaker

Dr. Yannis Hardalupas
Imperial College London, UK
CSP'20 Keynote Speaker

Dr. Raya Al-Dadah
University of Birmingham, UK
ENFHT 2021 Keynote Speaker

Dr. Richard Stone
University of Oxford, UK
CSP 2021 Keynote Speaker

Dr. Longfei Chen
Beihang University, China
ENFHT 2021 Keynote Speaker

Dr. Yang Wenming
National University of Singapore (NUS), Singapore
CSP 2021 Keynote Speaker

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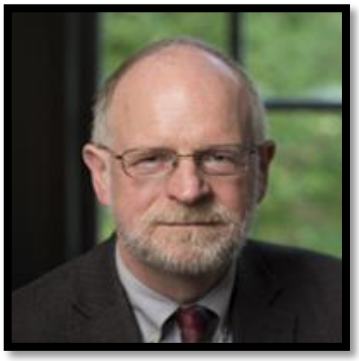
ICMFHT KEYNOTE SPEAKER



Topic of Keynote: Numerical Simulations of Complex Multiphase Flows: Opportunities and Challenges

Dr. Gretar Tryggvason, Johns Hopkins University, USA

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Gretar Tryggvason is the Charles A. Miller, Jr. Distinguished Professor at the Johns Hopkins University and the head of the Department of Mechanical Engineering. He received his PhD from Brown University in 1985 and was on the faculty of the University of Michigan in Ann Arbor until 2000, when he moved to Worcester Polytechnic Institute as the head of the Department of Mechanical Engineering. Between 2010 and 2017, he was the Viola D. Hank professor at the University of Notre Dame and the chair of the Department of Aerospace and Mechanical Engineering.

Professor Tryggvason is well known for his contributions to computational fluid dynamics; particularly the development of methods for computations of multiphase flows and for pioneering direct numerical simulations of such flows. He served as the editor-in-chief of the Journal of Computational Physics 2002-2015, is a fellow of APS, ASME and AAAS, and the recipient of several awards, including the 2012 ASME Fluids Engineering Award and the 2019 ASTFE Award.

ICMFHT KEYNOTE SPEAKER

Topic of Keynote: State-Of-The-Art Laser-Diagnostic Measurement Techniques Applied To Multiphase Flows

Dr. Christos Markides, Imperial College London, UK

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Christos Markides is Professor of Clean Energy Technologies, Head of the Clean Energy Processes Laboratory, and leads the Experimental Multiphase Flow Laboratory, which is the largest experimental space of its kind at Imperial College London. He is also, amongst other, Editor-in-Chief of 'Applied Thermal Engineering', and a member of the UK National Heat Transfer Committee. He has published >250 journal papers and >300 conference papers on topics relating to his keynote speech. He won multiple awards including IMechE's 'Donald J. Groen' outstanding paper prize in 2016, IChemE's 'Global Award for Best Research Project' in 2018, the Engineers without Borders 'Chill Challenge' in 2020, and received Imperial College President's Award for Research Excellence in 2017.

ENFHT KEYNOTE SPEAKER

Topic of Keynote: Research challenges for Zero Carbon and Sustainable Fuels: Prospects and the Pathway Forward

Dr. Mohamed Pourkashanian, The University of Sheffield, UK

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Professor M. Pourkashanian: is the Head of Energy Institute at the University of Sheffield. He holds a chair in Energy Engineering, is the General Secretary for the International Flame Research Foundation (IFRF) and is Managing Director of the Translational Energy Research Centre National Facilities. He has completed numerous major research projects on clean energy technology, receiving substantial grants from the EPSRC, EU, and NATO. During his career at Universities of Sheffield and Leeds Professor Pourkashanian has successfully managed over 100 research contracts and grants, with a total value well over £90 million –with active research grants for 2019 is in excess of £19M relating to clean energy projects.

His research is in the field of future clean and sustainable energy technology. He and his students have authored over 415 publications in refereed journals and conferences and have co-authored a few books on coal and biomass combustion. Professor Pourkashanian has graduated over 87 Ph.D. candidates and supervised over 40 postdoctoral scholars. He is currently supervising 28 Ph.D. graduate students and 15 research associate/fellows, Chair of International CCS Test Centre, member of Industrial Strategy Challenge Fund (ISCF): Industrial Decarbonisation Advisory Group, Fellow of the Energy Institute and Chartered Engineer.

ENFHT KEYNOTE SPEAKER

Topic of Keynote: Numerical Approaches to Industrial Flow Optimization

Dr. Harvey Thompson, Leeds University, UK

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Professor Harvey Thompson (HT) FIMechE is Professor of Computational Fluid Dynamics (CFD) and Head of the School of Mechanical Engineering at the University of Leeds. He has published over 100 journal papers in the areas of CFD, Heat Transfer and Multi-disciplinary Design Optimisation (MDO) of engineering products and processes and has collaborated with leading companies in the aerospace, automotive and food sectors. His recent research in CFD-enabled flow optimisation has been focussed in electronics and machine tool cooling systems and is finding application in a range of other biological, chemical and nuclear flow processing systems.

ENFHT KEYNOTE SPEAKER

Topic of Keynote: Enhancing Heat and Mass Transfer in Adsorption Heat Pumps Using Advanced Metal Organic Framework Materials

Dr. Raya Al-Dadah, University of Birmingham, UK

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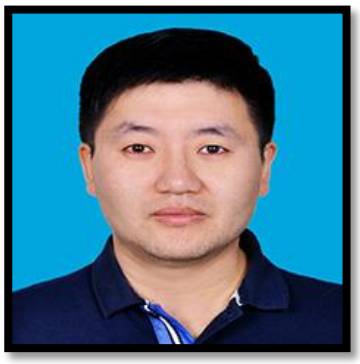
AL-DADAH, Raya (F) is a reader in sustainable energy technologies in the School of Engineering at the University of Birmingham. She was awarded BSc in Mechanical Engineering in 1985 and PhD in Electrohydrodynamic enhancement of boiling heat transfer in 1994. She took lectureship position at UoB in 1995, promoted to senior lecturer in 2014 and to a reader in 2019. She has more than 20 years research experience in the fields of heat transfer, heat powered refrigeration systems and harnessing solar energy. She is a fellow of the Institute of Refrigeration, fellow of the Institute of Mechanical Engineers and member of the Higher Education Academy (UK). She has researched and supervised research projects and published over 150 papers in reputable journals and international conferences with H index of 24.

Specific Research interests:

- Heat powered adsorption technology for energy storage, cooling, heating, power generation and water desalination using advanced adsorbent materials namely Metal Organic Framework (MOF.
- Harnessing solar energy: Developing efficient methods of harnessing solar energy based on concentrated Photovoltaic cells (silicon cells as well as multi-junction cells) for both electricity and heat energy production (PVT and CPVT).
- Liquid Air Energy Storage: Developing efficient cold energy recovery systems for cooling, power generation and freeze water desalination.

ENFHT KEYNOTE SPEAKER



Topic of Keynote: An Ultrafine Particle Number Measurement System Operating Under Wide Temperature Rang

Dr. Longfei Chen, Beihang University, China

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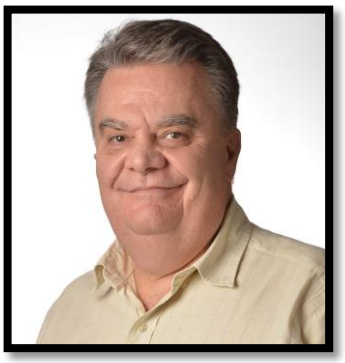
Longfei Chen is Professor in the School of Energy and Power Engineering at Beihang University, China. He received his bachelor's and master's degrees in Automotive Engineering from Tsinghua University, and his Ph.D. degree in Engineering Science from the University of Oxford. He has published more than 60 refereed journal articles. He serves as the secretary general of the Aviation Internal Combustion Engine Branch of Chinese Society for Internal Combustion Engines, and the member of SAE E31 Working Group of ICAO Emission Standards Committee. He has received many awards including the National Excellent Young Scholar (2019), China Internal Combustion Engine Society Outstanding Researcher (2019), the 4th China-France team cooperation innovation award (R&D Award, 2017), Beijing Science and Technology Nova Star Award (2018), and the First Prize Paper awarded by Chinese society for IC engines (2015). His research interest lies in particle emissions, spray and combustion, ice nucleation in atmosphere, more specifically in:

1. developing the measurement system for particle emissions;
2. the heat and mass transfer in multi-phase flow;
3. condensation and icing of atmospheric particles.

CSP KEYNOTE SPEAKER



Topic of Keynote: Decarbonized Combustion: Research Needs for Zero Pollution

Dr. Yannis Hardalupas, Imperial College London, UK

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Dr. Yannis Hardalupas received his Mechanical Engineering degree from National Technical University of Athens, Greece, followed by a PhD at Imperial College London. He was awarded an EPSRC Advanced Research Fellowship for experimental research on combustion of liquid and solid fuels before joining the academic staff at Mechanical Engineering Department of Imperial College, where he was promoted to Professor in 2009. In 2000, he spent a year at Ricardo Consulting Engineers working on computational models for liquid atomization through a Royal Academy of Engineering industrial secondment award.

His research covers combustion, heat and mass transfer, liquid atomisation and sprays and the development and application of novel optical and laser diagnostics. The latter led to patents for instruments on powder sizing, planar droplet sizing, nanoparticle sizing and novel imaging devices. His research contributed to gas- and liquid- fuelled land-based gas turbines, coal burners, aeroengines, gasoline and Diesel engines and liquid propellant rocket engines. He also researched spray drying and Cleaning-In-Place processes for the chemical and food industry and ‘nanofluids’ as improved coolants for fusion and fission reactors.

He is a Fellow of the Institute of Physics and Associate Fellow and member of the technical committee of Propellants and Combustion of the American Institute of Aeronautics and Astronautics. He chairs the Combustion Physics Group of the Institute of Physics, is an Editor of Experimental Thermal and Fluid Science and serves at the advisory and editorial boards of Experiments in Fluids and Int. J. of Spray and Combustion Dynamics.

CSP KEYNOTE SPEAKER

Topic of Keynote: Laminar Burning Velocity Measurements Using Constant Volume Vessel Methods

Dr. Richard Stone, University of Oxford, UK

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Prof Richard Stone is well known as the author of 'Introduction to Internal Combustion Engines' that was first published in 1985 and for which a 5th edition is now needed. His studies of combustion in spark ignition engines have led to the award of the IMechE Crompton Lanchester Medal, the Sugden Award of the British Section of the Combustion Institute on two occasions, and the 2019 SAE Myers Award.

For the last 25 years much work has been with optical access engines, and he has been a PI on 15 EPSRC funded projects: https://gow.epsrc.ukri.org/NGBOViewPerson.aspx?PersonId=34512. His collaboration with Jaguar Land Rover (JLR) over the last 17 years has been supported directly and with additional support from the EPSRC and InnovateUK. His interests include flow measurement, mixture preparation and particulate matter emissions. His work on laminar burning velocity measurements has been supported by the EPSRC, Shell and BP.

He was editor of the Journal of Power and Energy for 5 years and is currently an Assistant Editor. In 2020 he was elected a Fellow of the Royal Academy of Engineering.

CSP KEYNOTE SPEAKER

Topic of Keynote: Impact of Various Fuels with Different Molecular Structures on Combustion Process and Soot Formation

Dr. Yang Wenming, National University of Singapore (NUS), Singapore

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Dr Yang Wenming is currently the Dean's Chair Professor in the department of Mechanical Engineering, National University of Singapore. He is also the editor-in-chief of Energy Engineering. His research interests include: development of Lower Temperature Combustion (LTC) Technologies, fuel design and its application in internal combustion engines, combustion and emissions control of biomass boilers and coal boilers etc. He has authored/co-authored more than 340 papers in international peer-reviewed journals and conferences, of which, more than 270 papers are SCI index, and most of his papers are published in top 10% journals. His papers have been cited by more than 10900 times with a H-index of 56. He is currently the Principal Investigator or Co-PI for 14 competitive research grants funded by National Funding Agencies and Ministry of Education of Singapore, worth more than $30 million US dollars. He has won a series of awards including the Dean's Chair professor, 4 times of scientific progress award (2nd prize) by the Ministry of Education of China and the Society of Mechanical Engineering of China; two papers was awarded the best paper by Applied Energy (Elsevier) in 2014 and 2016 respectively; He is also the regular reviewer for a lot of peer-reviewed reputable journals such as Applied Energy, Energy Conversion and Management, Fuel, Combustion and Flame, Progress in Energy and Combustion Sciences etc.

LIST OF PAPERS

The following papers were presented at the 6th World Congress on Momentum, Heat and Mass Transfer.

CDF

Title: Modelling Of Heat Transfer In Turbulent Bubbly Flows Using Direct Numerical Simulations

Authors: Sonolet Aymeric, Guillaume Bois, Adrien Toutant

View Paper

Title: Flow Simulation of Gas Cyclone Separator at High Reynolds Number Using the Elliptic-Relaxation Hybrid LES/RANS (ER-HRL) Model

Authors: Mohamed A. Sayed1, , Abdel Dehbi , Bojan Niceno , Konstantin Mikityuk , Maria Krinner

View Paper

Title: Numerical Simulation of Free Convection and Surface Radiation in a Large-Scale Cavity with a Heater

Authors: Igor Miroshnichenko, Mikhail Sheremet, Stepan Mikhailenko

View Paper

Title: On Drag Reduction and Heat Transfer in Turbulent Channel Flow over Circular Dimples: The Shift of the Deepest Point of Dimples

Authors: Yong Eng, C.M.J. Tay, B.C. Khoo

View Paper

Title: Numerical Study of the Air Injection Method into the Flat-Panel Photobioreactor

Authors: Miroslav Rebej, Jiří Vondál, Zdeněk Jegla

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LIST OF PAPERS

CDF

Title: Numerical Modelling and Analysis of a Microfluidic PCR Device
Authors: Foteini Zagklavara, Peter K. Jimack , Nikil Kapur , Osvaldo M. Querin , Harvey M. Thompson

View Paper

Title: Modeling of Viscous Fingering based on the numerical solution of the Navier-Stokes Equations in 3D.

Authors: Andres Pinilla , Luis Ramirez , Miguel Asuaje , Nicolas Ratkovich

View Paper

Title: Analysis of the Effect of Viscosity in an Electric Submersible Pump (Esp) Through A Cfd Approach
Authors: Johan García, Nicolas Ratkovich

View Paper

Title: Refrigerant Mass Distribution in an R600a Household RefrigeratorFreezer during Cyclic Operation
Authors: Wonhee Cho , DongChan Lee , Dong Soo Jang , Yongchan Kim

View Paper

Title: Numerical Modelling Of a Rectangular Shell-And-Tube Heat Exchanger
Authors: Marwa Ben Slimene, Sébastien Poncet, Jamel Bessrour, Ftouh Kallel

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Combustion

Title: Rate Constants of the Dimerization of PAH Molecules: A Theoretical Study

Authors: A.S. Savchenkova , A.S. Semenikhin , I.V. Chechet , M. Frenklach , A M. Mebel

View Paper

Title: Pressure Coupling Of the Spherical Linear Eddy Model to RANS-CFD for Internal-Combustion Engine Simulation

Authors: Nidal Doubiani , Abhilash Menon , Alan R. Kerstein , Michael Oevermann

View Paper

Title: Numerical Simulation Study on the Effects of Diatomic Gas Addition on Soot and Its Precursors in Acetylene Premixed Flame

Authors: Hassan Osaf Ali , Muhammad Hassaan Athar , Talha Nadeem Hassan , Faheem-ul-Hasnain , Muhammad Azeem Ghouri

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Multiphase Flow and Heat Transfer

Title: Effect Of Drag Models In Two-Phase Solid-Gas Particles Ceria-Nitrogen: A Hydrodynamic Study Of The Fluidized Bed Reactor
Authors: Priyanka Swarnkar, T. Sundararajan
View Paper

Title: Evaluation of a Phenomenological Model for Diabatic CO2 Two Phase Pressure Drop with Experimental Data inside Horizontal Tubes
Authors: Lixin Cheng, , Guodong Xia
View Paper

Title: Flow Boiling In Plain and Porous Coated Microchannels
Authors: Vivian Y.S. Lee , Gary Henderson , Alex Reip , Tassos G. Karayiannis
View Paper

Title: Pressure Coupling Of the Spherical Linear Eddy Model to RANS-CFD for Internal-Combustion Engine Simulation
Authors: Mostafa, F. Almasi,A. Hadjadj
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Experimental Fluid Flow and Heat Transfer

Title: Experimental Study on Electrified Micro-Jet Instability in Electrohydrodynamic Atomization (EHDA) Cone-Jet

Authors: Shiqi Yang , Zhentao Wang

View Paper

Title: Experimental Study on the Solidification Behaviors in a Latent Heat Thermal Energy Storage Unit with Tree-Shaped Fins

Authors: Chengcheng Fan, Hao Xu, Chengbin Zhang, Zilong Deng

View Paper

Title: Puffing/Micro-explosion in Composite Droplets in Tandem: Experimental Results and Modelling

Authors: Dmitrii Antonov , Roman Fedorenko , Pavel Strizhak , Guillaume Castanet , Sergei S. Sazhin

View Paper

Title: Puffing/Micro-explosion in Composite Mono- and Multi-component Droplets: Experimental Results and Modelling

Authors: Roman Fedorenko , Dmitrii Antonov , Pavel Strizhak , Elena Shchepakina , Vladimir Sobolev , Sergei S. Sazhin

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Experimental Fluid Flow and Heat Transfer

Title: Validation study of Large-Scale Simulation of CO2 or H2O Gasification with Mass Transfer for Metallurgical Coke

Authors: Yui Numazawa , Yohsuke Matsushita , Hideyuki Aoki , Takahiro Shishido , Noriyuki Okuyama

View Paper

Title: Production of Red Blood Cells mimics in a flow focus device with rectangular cross section

Authors: Ms. Ana Isabel Moreira, J. Carneiro, J. B. L. M. Campos, J. M. Miranda

View Paper

Title: Experimental Study on Evaporation Heat Transfer Characteristics of R32 in A Plate Heat Exchanger

Authors: Jaewan Yang, DongChan Lee, Yongchan Kim

View Paper

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Heat Transfer Applications

Title: ANN-based Classification of Operating Data in Humid Air-Water Heat Exchangers
Authors: Gabriela Avila , Arturo Pacheco-Vega

View Paper

Title: Thermal Conductivity and Viscosity of Ionanocolloids for Applications in Thermal Energy Systems
Authors: Elaine Fabre and S M Sohel Murshed

View Paper

Titles: A Study of Segregation Behaviour with Rotation Speed in a Double-Walled Rotating Drum
Authors: Shih-Hao Chou, Shu-San Hsiau

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SPONSORS

International ASET Inc. would like to thank the following sponsors for their support of MHMT 2021:

UK National Heat Transfer Committee

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JOURNAL PUPLICATION

Selected articles from the congress will be published in the following journal after a secondary review process:

JFFHMT - Journal of Fluid Flow, Heat and Mass Transfer

These journals have adopted to the open-access model, meaning all free access to the journal's articles and content with no need for subscription. This ensures larger audience and therefore higher citations.

Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles in this journal without asking prior permission from the publisher or the author. This is in accordance with the BOAI defi nition of open access.

All published papers of JFFHMT will be submitted to Google Scholar, Microsoft Academic Search, Open J-Gate, Mendeley, Index Copernicus International, Academic Index, Mendeley, Primo Central, and Genomics JournalSeek for possible indexing. Additionally, they will be permanently archived in Portico (one of the largest community-supported digital archives in the world) and will be assigned unique DOIs.

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MHMT 2021

The 8th World Congress on Momentum, Heat and Mass Transfer (MHMT'2022) will be held on April 10 - 12, 2022 in Lisbon, Portugal.

For inquiries and to obtain further information on the congress, please visit the MHMT 2022

You can also email info@mhmtcongress.com or call us

at: +1-613-834-9999

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ETHICS & MALPRACTICE

Publication Ethics and Publication Malpractice Statement

The following statement is mainly based on the Code of Conduct and Best-Practice Guidelines for Journal Editors (Committee on Publication Ethics, 2011).

Scientific Committee

Scientific Committee
Scientific committees consisting of experts in the fields are established. The committees oversee the peer-review and publication process. To see the scientific committee members, please follow the link below.
Scientific Committee

Equality and Decisions
One or more reviewer, scientific committee member, or chair, (internal or external), are responsible for evaluating the relevance of the submitted manuscripts to the proceedings, technical and scientific merit, originally, and impact. These evaluations are to be carried out regardless of ethnicity, religion, gender, sexual orientation, political beliefs, and institutions. Successive to peer-review, the Chair has full authority and is solely responsible for the published content and the process thereof.

Confidentiality
Scientific committee member(s) and publishing staff may not disclose manuscripts or their content, directly or indirectly, to anyone other than individuals invited to review the manuscript (whether they accept or not), other reviewers of the same publications, and publishing staff.

Conflicts of Interest
Scientific committee member(s) and publishing staff may not utilize the contents of submitted manuscripts whether accepted or rejected, directly or indirectly for their own research purposes without prior written consent by the authors.

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ETHICS & MALPRACTICE

Reviewers

Contribution to Decisions

In order for final decisions to be made regarding acceptance or rejection of papers, we rely on peer-review. Peer-review is the process of experts in the field reading, understanding, and objectively commenting on submitted papers. Through peer-review, scholars give back to the academic and scientific community by helping the chair(s) make decisions regarding manuscripts.

Promptness

Reviewers should promptly notify the chair(s) if they are unable or unqualified to carry out their reviewing duties. Reviewers should do their best to provide the reviews to the chair(s) as promptly as possible, and within the designated time-frame.

Confidentiality

Reviewers must not share the contents of the manuscripts they receive for review, regardless of their decision to review or contents of the review, directly or indirectly, with anyone other than the person who has assigned the review.

Fairness

Reviewers should review manuscripts fairly and objectively, with supporting evidence or arguments, regardless of personal feelings or biases.

Thoroughness

Reviewers should thoroughly read, understand, and provide constructive feedback with the aim of improving the manuscript. Reviewers should aim to identify and report technical issues, irregularities, mistakes, missing citations, and similarity to other published work.

Conflicts of Interest

Invited reviewers should immediately inform the chair(s) in case of a conflict of interest based on competitive, collaborative, personal, family, and other relationships with the authors or people involved in the work.

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ETHICS & MALPRACTICE

Authors

Authorship

Only persons who have significantly contributed to the work and the manuscript can be named authors on a paper. These contributions include the idea/concept, design, experiments, evaluation, analysis, drafting or revision of the manuscript, and others. Authors must all have agreed to be named as such and for the manuscript to be submitted. Anyone who has contributed based on the above, but the level of contribution is not significant, may appear in the acknowledgement section of the manuscript.

Accuracy, Originality, and Plagiarism

Authors should describe their work and the results of their work accurately and in full. The level of provided accuracy and detail should be such that a reader can replicate the work independently. Inaccurate, incomplete, fraudulent, and misleading statements are considered unacceptable and unethical. Direct or indirect use of other people's work is not allowed, unless properly cited. Previous works that have influenced the current work should also be cited. Presenting someone else's work as one's own is strictly prohibited and is considered plagiarism.

Data and Material

Authors are encouraged to share their data, software, or other sharable material online, provided copyright and ownership laws surrounding that particular project permit. Authors may also be asked to share such material with the chair(s), and/or reviewers, and must be willing to do so if asked.

Dual Submissions

Submitting a manuscript to more than one venue (conference, journal, etc) simultaneously is not allowed. Presenting previously published work to be considered as a new submission, without a significant new interpretation or analysis, is prohibited.

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ETHICS & MALPRACTICE

Conflicts of Interest

Authors must notify the chair(s) at the time of submission, if any factor outside the scope of the research has influenced any step of the work and manuscript writing. Examples of such factors include but are not limited to funding, grants, advisory and consultancy, stock ownership, current or past employment, and memberships, among others. All funding sources should be disclosed in the manuscript.

Animal and Human Subjects

Works involving human and/or animal subjects must ensure that the work has abided by institutional guidelines, and pre-approved by required bodies. Moreover, consent must be acquired from participants, and privacy of subjects must be ensured. All of the above must be specified with clear statements in the manuscript.

Hazardous Material

It should clearly be identified in the manuscripts if the works have involved hazardous chemicals and material, or devices that can be harmful.

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