# Seshasai Srinivasan

Graduate students are in bold, and other researchers (PDFs/Undergrads) are in italics.

My Role is identified with the following tags: 1 = data collection, 2 = data analysis, 3 = manuscript preparation, s = minor contribution (< 25%), e = equal contribution, m = major contribution (> 80%), f = full contribution, Supervisor = mentoring, co-authoring/ editing manuscripts, and some possible assistance with data analysis.

## **Peer Reviewed**

## Contribution to Books

- 13. Syed Rahin Ahmed, Ana Gomez Cardoso, Satish Kumar, Greter A. Ortega, Seshasai Srinivasan and Amin Reza Rajabzadeh (2021). "Nanozymes in biosensing, therapeutics, and bioimaging " in "Nanozymes: Advances and Applications", Ed. Sundaram Gunasekaran, published by CRC Press, Taylor & Francis group. (My role: PI and Supervisor).
- Nasim Muhammad and Seshasai Srinivasan (2021). Transition from In-class to Online Lectures During A Pandemic: in "Visions and Concepts for Education 4.0", Eds M. E. Auer and D. Centea, ICBL 2020, AISC 1314, pp 1-8, Published by Springer Nature, Switzerland. (My role: 1e, 2f, 3f).
- Seshasai Srinivasan and Dan Centea (2021). Problem Based Learning in Finite Element Analysis: in "Visions and Concepts for Education 4.0", Eds M. E. Auer and D. Centea, ICBL 2020, AISC 1314, pp 1-7, Published by Springer Nature, Switzerland. (My role: 1f, 2f, 3m)
- Steven Bogoslowski, Fei Geng, Zhen Gao, Amin Rajabzadeh and Seshasai Srinivasan. (2021). Integrated Thinking

   A Cross-disciplinary Project-Based Engineering Education: in "Visions and Concepts for Education 4.0", eds M.
   E. Auer and D. Centea, ICBL 2020, AISC 1314, pp 1-7, Published by Springer Nature, Switzerland. (My role: 3s)
- 9. Dan Centea and Seshasai Srinivasan. (2021) Collaboration with Industry in the Development and Assessment of a PBL Course': in "Visions and Concepts for Education 4.0", eds M. E. Auer and D. Centea, ICBL 2020, AISC 1314, pp 1-7, Published by Springer Nature, Switzerland. (My role: 3s).
- Srinivasan S, Rajabzadeh AR and Centea D. (2020). A Project-Centric Learning Strategy in Biotechnology: in "The Impact of the 4th Industrial Revolution on Engineering Education. ICL 2019. Advances in Intelligent Systems and Computing." : pp 830-838. Springer Nature, Switzerland. (My role: 1p, 2f, 3f).
- 7. Muhammad N and Srinivasan S. (2020). A Problem Solving Based Approach to Learn Engineering Mathematics. In "The Impact of the 4th Industrial Revolution on Engineering Education. ICL 2019. Advances in Intelligent Systems and Computing.": pp 839-848. Springer Nature, Switzerland. (My role: 1e, 2f, 3f).
- Centea D, Srinivasan S, Singh I and Wanyama T. (2020). A Collaborative Approach in Designing Curriculum for Industry 4.0 Software Integration Implementation. In "The Impact of the 4th Industrial Revolution on Engineering Education. ICL 2019. Advances in Intelligent Systems and Computing.": pp 135-144. Springer Nature, Switzerland. (My role: 3s).
- Srinivasan S and Centea D. (2019). An Active Learning Strategy for Programming Courses. In "Mobile Technologies and Applications for the Internet of Things. IMCL 2018. Advances in Intelligent Systems and Computing.": 327-336. Springer Nature, Switzerland. (My role: 1f, 2f, 3m)
- Centea D and Srinivasan S. (2019). Assessment in Problem-Based Learning Using Mobile Technologies. In "Mobile Technologies and Applications for the Internet of Things. IMCL 2018. Advances in Intelligent Systems and Computing.": 337-346. Springer Nature, Switzerland. (My role: 3s).
- 3. *Sidhu G*, Srinivasan S and Centea D. (2017). Implementation of a Problem Based Learning Environment for First Year Engineering Mathematics. In "Social Progress and Sustainability.": 201-208. Aalborg: Aalborg Universitets-forlag, Denmark. (My role: 1f, 2f, 3m).
- 2. Centea D and Srinivasan S. (2017). Enhancing Student Learning through Problem Based Learning. In "Social Progress and Sustainability.": 376-385. Aalborg: Aalborg Universitetsforlag, Denmark. (My role: 3e).
- Srinivasan S and Centea D. (2015). Applicability of Principles of Cognitive Science in Active Learning Pedagogies. In "Proceedings of the 13th International Workshop Active Learning in Engineering.": 99-104. Aalborg: Aalborg Universitetsforlag, Denmark. (My role: 1f, 2f, 3m).

#### Journal Articles - Pedagogical Research

- 10. *Leanne A Greaves, James McKendry*, Nasim Muhammad and Seshasai Srinivasan. "The Transition from In-class to Online Lectures During a Pandemic: Understanding the Student Experience." Int. J. Eng. Educ., 2021. in press (My Role: PI and Supervisor). (Impact Factor: 1.29)
- 9. *Gaganpreet Sidhu* and Seshasai Srinivasan. Integration of Ethics, Sustainability, and Social Responsibility Components in an Undergraduate Engineering Course on Finite Element Analysis. Int. J. Eng. Educ., 2021, in press (My Role: PI and Supervisor).(Impact Factor: 1.29)
- Seshasai Srinivasan, Juan Antonio Lopez Ramos, and Nasim Muhammad. "A Flexible Future Education Model-Strategies Drawn from Teaching during the COVID-19 Pandemic,. "Educ. Sci., 2021, Vol. 11, pp.557. (My Role: 1e, 2e, 3m). (Impact Factor: 2.15)
- Nasim Muhammad and Seshasai Srinivasan, "Online Education During a Pandemic Adaptation and Impact on Student Learning", Int. J. Engineering Pedagogy, 2021, Vol. 11, No. 3, pp 71-83. (My role: 2f, 3f). (Impact factor: 1.79)
- Gaganpreet Sidhu, Seshasai Srinivasan and Nasim Muhammad, "Challenge-based and Competency-based Assessments in an Undergraduate Programming Course", Int. J. Emerging Technologies in Learning, 2021, Vol. 16, Issue 13, pp. 17-28. (My role: 1e, 3s). (Impact Factor: 2.59)
- Seshasai Srinivasan and Nasim Muhammad, "Implementation of a Course in Computational Modeling of Biological Systems in an Undergraduate Engineering Program", Int. J. Engineering Education, Vol. 36 (3), pp 857-864, 2020. (My role: 2f, 3f). (Impact Factor: 1.29)
- 4. Seshasai Srinivasan and Nasim Muhammad, "A Constructivist Approach for Mathematics Education", Journal of Education and Pedagogy, Vol. 12, pp 1-5, 2020. (My role: 1e, 2f, 3f).
- 3. Seshasai Srinivasan and Nasim Muhammad, " Effect of the Time of Day of Instruction on Student Learning", International Journal of Pedagogy and Teacher Education, Vol. 4, pp 126-137, 2020. (My role: 1e, 2f, 3f).
- 2. *Gaganpreet Sidhu* and Seshasai Srinivasan, "An Intervention-Based Active-Learning Strategy To Enhance Student Performance in Mathematics", Int. J. of Pedagogy and Teacher Education, Vol. 2 (6), pp 277-288, 2018. (My Role: Supervisor)
- 1. Dan Centea and Seshasai Srinivasan, "A Comprehensive Assessment Strategy for a PBL Environment", International Journal of Innovation and Research in Educational Sciences, Vol. 3 (6), pp 364-372, 2016. (My role: 3s).

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- 44. Seshasai Srinivasan. "A Three-Stage Solidification Model for Food Particles". Foods, 2021. (Impact Factor: 4.35)
- Ramavtar Tyagi, Amirmasoud Lanjan, and Seshasai Srinivasan. "Co-Doping Strategies to Improve the Electrochemical Properties of LixMn2O4 Cathodes for Li-Ion Batteries". ChemElectroChem, 2021. DOI: 10.1002/celc.202101626. (My Role: PI and Supervisor). (Impact Factor: 4.59)
- 42. Syed Rahin Ahmed, Greter A Ortega, Satish Kumar, Seshasai Srinivasan and Amin Reza Rajabzadeh. "Strong Nanozymatic Activity of Thiocyanate Capped Gold Nanoparticles: An Enzyme-Nanozyme Cascade Reaction Based Dual Mode Ethanol Detection in Saliva". New Journal of Chemistry, DOI: 10.1039/D1NJ03648C, in press (My Role: PI and Supervisor). (Impact Factor: 5.591)
- 41. Sylvie Antoun, Seshasai Srinivasan, and M Ziad Saghir. "A Refined Molecular Dynamics Approach to Predict the Thermophysical Properties of Positively Charged Alumina Nanoparticles Suspended in Water". International Journal of Thermofluids, 2021. doi: https://doi.org/10.1016/j.ijft.2021.100114 (My Role: 3s).(Impact Factor: 1.7)
- 40. Greter Ortega, Syed Rahin Ahmed, Satish K. Tuteja, Seshasai Srinivasan, and Amin Reza Rajabzadeh. "A Biomoleculefree Electrochemical Sensing Approach based on a Novel Electrode Modification Technique: Detection of Ultra-Low Concentration of Delta-9-tetrahydro-cannabinol in Saliva by Turning a Sample Analyte into a Sensor Analyte.", Talanta. 2021, In press. (My Role: PI and Supervisor). (Impact Factor: 5.34)

- Amirmasoud Lanjan, Zahra Moradi and Seshasai Srinivasan. "A Multi-Scale Investigation of Diffusion Mechanism Within the Solid-Electrolyte Interface Layer: Coupling Quantum Mechanics, Molecular Dynamics, and Macro-Scale Mathematical Modeling. "ACS Applied Materials & Interfaces, 2021. DOI: 10.1021/acsami.1c12322. (My Role: PI and Supervisor). (Impact Factor: 9.23)
- 38. Ortega Greter, Del Sol Fernandez Susel, Portilla Yadileiny, Cedeño Enrique, Reguera Edilso, Srinivasan Seshasai, Barber Domingo F., Marin E., Rajabzadeh Amin Reza. "Rod-like particles of polydopamine-CdTe quantum dots: An actuator as a photothermal agent and reactive oxygen species-generating nanoplatform for cancer therapy. "ACS Applied Materials & Interfaces, 2021. https://doi.org/10.1021/acsami.1c08676. (My Role: 3s). (Impact Factor: 9.23)
- 37. Jay Vora, Vivek Patel, Seshasai Srinivasan, Rakesh Chaudhari, Danil Yurievich Pimenov, Khaled Gaisin and Shubham Sharma. Optimization of Activated Tungsten Inert Gas Welding Process Parameters Using Heat Transfer Search Algorithm: With Experimental Validation Using Case Studies. Metals, Vol. 11, pp. 981, 2021. https://doi.org/10.3390/met11060981. (My Role: 3e). (Impact Factor: 2.42)
- 36. Syed Rahin Ahmed, Satish Kumar Tuteja, Greter Amelia Ortega Rodriguez, Seshasai Srinivasan and Amin Rajabzadeh, "Target Specific Aptamer-Induced Self-assembly of fluorescent Graphene Quantum Dots on Palladium Nanoparticles for Sensitive Detection of Tetracycline in Raw Milk". Journal of Food Chemistry, Vol. 346, pp 128893, 2021. (My Role: PI and Supervisor). (Impact Factor: 6.306)
- 35. *Rohit Chand, Neha Mittal,* Seshasai Srinivasan and Amin Rajabzadeh, "Upconverting Nanoparticles Clustering Based Rapid Quantitative Detection of Tetrahydrocannabinol (THC) on Lateral-flow Immunoassay". The Analyst, Vol. 146, pp. 574-58-, 2021. (My Role: PI and Supervisor).(Impact Factor: 3.864)
- Zahra Moradi, Amirmasoud Lanjan and Seshasai Srinivasan, "Multi-Scale Investigation into Co-Doping Strategy on The Electrochemical Properties of Li2RuO3 Cathode for Li-Ion Batteries". ChemElectroChem, Vol. 8, pp. 112-124, 2021. (My Role: PI and Supervisor). (Impact Factor: 4.59)
- Syed Rahin Ahmed, Rohit Chand, Satish Kumar Tuteja, Neha Mittal, Seshasai Srinivasan and Amin Rajabzadeh, "Recent Biosensing Advances in the Rapid Detection of Illicit Drugs". Trends in Analytical Chemistry. Vol. 131, pp 116006, 2021. (My Role: PI and Supervisor). (Impact Factor: 9.8)
- 32. Karthikumar Thakkar, Surendra Singh Kachhwaha, Pravin Kodgire and Seshasai Srinivasan, "Combustion Investigation of Ternary Blend Mixture of Biodiesel/N-Butanol/Diesel: CI Engine Performance and Emission Control". Renewable & Sustainable Energy Reviews, Vol. 137, pp 110468, 2020. (My role: 3s). (Impact Factor: 14.98)
- Zahra Moradi, Amirmasoud Lanjan and Seshasai Srinivasan, "Enhancement of Electrochemical Properties of Lithium Rich Li2RuO3 Cathode Material". J Electrochemical Society. Vol. 167(11), pp 110537, 2020. (My Role: PI and Supervisor). (Impact Factor: 4.316)
- Ramavtar Tyagi and Seshasai Srinivasan, "Molecular Dynamics Modeling of Lithium Ion Intercalation Induced Change in the Mechanical Properties of LixMn2O4". Journal of Chemical Physics, Vol. 153, pp 164712, 2020. (My Role: PI and Supervisor). (Impact Factor: 3.48)
- 29. *Gaganpreet Sidhu*, Seshasai Srinivasan and Sanjeewan Bhole, "A Model For Bainite Formation at Isothermal Heat Treatment Conditions", ASME Journal of Thermal Science and Engineering Applications, Vol. 12(1): 011006, 2020. (My role: PI and Supervisor). (**Impact Factor: 1.544**)
- Subash Dhakal and Seshasai Srinivasan, "Study of Effective Electrical Conductivity of Additive Free Electrodes Using a Homogenization Method", Journal of Energy and Power Engineering, Vol. 13, pp. 249-266, 2019. (My Role: PI and Supervisor). (Impact Factor: 0.639)
- 27. Jay Vora, Abhishek Kumar, Seshasai Srinivasan, "Attaining optimized A-TIG welding parameters for carbon steels by advanced parameter-less optimization techniques: with experimental validation", J. Brazilian Society of Mechanical Sciences and Engineering, Vol. 41, No. 261, 2019. (My role: 3s). (Impact Factor: 2.22)
- Seyedeh Hoda Mozaffari, Seshasai Srinivasan and M Ziad Saghir, "A Study on Thermodiffusion in Ternary Liquid Mixtures Using Enhanced Molecular Dynamics Algorithm with Experimental Validation", Can. J. Chem. Eng., Vol. 97 (1), pp 344- 350, 2019. (My Role: Co-PI and Supervisor) (Impact Factor: 2.007)

- Gaganpreet Sidhu, Seshasai Srinivasan and Sanjeewan Bhole, "An algorithm for optimal design and thermomechanical processing of high carbon bainitic steels", International Journal of Aerodynamics, Vol.6 No.2/3/4, pp.176 - 196, 2018. (My Role: PI and Supervisor).
- Sylvie Antoun, M. Z. Saghir and Seshasai Srinivasan, "An improved molecular dynamics algorithm to study thermodiffusion in binary hydrocarbon mixtures", The Journal of chemical physics, Vol. 148(10), 104507, 2018. (My Role: Co-PI and Supervisor). (Impact Factor: 3.48)
- Sylvie Antoun, M. Z. Saghir and Seshasai Srinivasan, "Composition effect on thermophobicity of ternary mixtures: An enhanced molecular dynamics method", The Journal of chemical physics, Vol. 149, 034502, 2018. (My Role: Co-PI and Supervisor). (Impact Factor: 3.48)
- 22. Seyedeh Hoda Mozaffari, Seshasai Srinivasan and M Ziad Saghir, "Thermodiffusion in binary and ternary hydrocarbon mixtures studied using a modified heat exchange algorithm", Therm. Sci. and Eng. Prog., Vol. 4, pp. 168-174, 2017. (My Role: Co-PI and Supervisor). (Impact Factor: 4.946)
- 21. Seyedeh Hoda Mozaffari, Seshasai Srinivasan and M Ziad Saghir, "Evaluations of Molecular Dynamics Methods for Thermodiffusion in Binary Mixtures", ASME J. Therm. Sci. and Eng. App., Vol. 9, pp. 031011, 2017. (My Role: Co-PI and Supervisor). (Impact Factor: 1.544)
- M. Ziad Saghir, Amirhossein Ahadi, Abdulmajeed Mohamad and Seshasai Srinivasan, "Water Aluminum Oxide Nanofluid Benchmark Model", Int. J. Therm. Sci., Vol. 109, pp 148–158, 2016. (My role: 3s).(Impact Factor: 3.744)
- Seshasai Srinivasan and M. Ziad Saghir, "Predicting Thermodiffusion in an Arbitrary Binary Liquid Hydrocarbon mixtures using Artificial Neural Networks", Neural Computing and Applications, Vol. 25, pp 1193-1203, 2014. (My role: 1f, 2f, 3m). (Impact Factor: 5.606)
- A. Gully, H. Liu, Seshasai Srinivasan, A. K. Sethurajan, S. Schougaard and B. Protas, "Effective Transport Properties of Porous Electrochemical Materials A Homogenization Approach", Journal of Electrochemical Society, Vol. 161 (8), pp. E3066-E3077, 2014. (My role: 2s, 3s). (Impact Factor: 4.316)
- Seshasai Srinivasan and M. Ziad Saghir, "A Computational Evaluation of Micro-Scale and Macro-Scale Error Sources in a Thermodiffusive Cell", Journal of Computational Science, Vol. 5 (5), pp. 765–776, 2013. (My role: 1f, 2f, 3m). (Impact Factor: 3.976)
- Seshasai Srinivasan and M. Ziad Saghir, "New Algebraic Expressions for Thermodiffusion in Binary n-Alkane Mixtures", Canadian Journal of Chemical Engineering, Vol. 91 (6), pp. 1168–1174, 2013. (My role: 1f, 2f, 3m). (Impact Factor: 2.007)
- Seshasai Srinivasan and M. Ziad Saghir, "Modeling of Thermotransport Phenomenon in Metal Alloys Using Artificial Neural Networks", Applied Mathematical Modeling, Vol. 37, pp. 2850–2869, 2013. (My role: 1f, 2f, 3m). (Impact Factor: 5.129)
- Seshasai Srinivasan and M. Ziad Saghir, "A Neurocomputing Model to Calculate the Thermo-Solutal Diffusion in Liquid Hydrocarbon mixtures", Neural Computing and Applications, Vol. 24, pp. 287–299, 2012. (My role: 1f, 2f, 3m). (Impact Factor: 5.606)
- Aram Parsa, Seshasai Srinivasan and M. Ziad Saghir, "Impact of Density Gradients on the Fluid Flow Inside a Vibrating Cavity Subjected to Soret Effect", Canadian Journal of Chemical Engineering, Vol. 91 (3), pp. 550–559, 2012. (My role: 2s, 3s). (Impact Factor: 2.007)
- M. Ziad Saghir, Seshasai Srinivasan and Stefan Van Vaerenbergh, "Soret Measurement for Multi-Component Hydrocarbon Mixtures from Space Experiment Conducted Onboard FOTON M3 Unmanned Satellite", Applied Mechanics and Materials, Vol. 225, pp. 470-474, 2012. (My role: 2f, 3s).
- 11. Seshasai Srinivasan and M. Ziad Saghir, "Thermodiffusion in Ternary Hydrocarbon Mixtures: Part 2 n-decane/ isobutylbenzene/tetralin", Journal of Non-Equilibrium Thermodynamics, Vol. 37, pp. 99-113, 2012. (My role: 1f, 2f, 3m). (Impact Factor: 2.51)
- Seshasai Srinivasan and M. Ziad Saghir, "Impact of the vibrations on Soret separation in binary and ternary mixtures", Fluid Dynamics and Material Processing, Vol. 7, pp. 201-216, 2011. (My role: 1f, 2f, 3m). (Impact Factor: 2.25)

- Seshasai Srinivasan, D. Alonso de Mezquia, Mounir M. Bou-Ali, and M. Ziad Saghir, "Thermodiffusion and Molecular Diffusion in Binary n-alkane Mixtures: Experiments & Numerical Analysis", Philosophical Magazine, Vol. 91, pp. 4322-4344, 2011. (My role: 1e, 2f, 3m). (Impact Factor: 1.632)
- Seshasai Srinivasan and M. Ziad Saghir, "Thermodiffusion in ternary hydrocarbon mixtures: Part 1 n-dodecane/ isobutylbenzene/tetralin", Journal of Non-Equilibrium Thermodynamics, Vol. 36, pp. 243–258, 2011. (My role: 1f, 2f, 3m). (Impact Factor: 2.51)
- Seshasai Srinivasan and M. Ziad Saghir, "Experimental Approaches to Study Thermodiffusion A Review", International Journal of Thermal Sciences, Vol. 50, pp. 1125–1137, 2011. (My role: 1f, 2f, 3m). (Impact Factor: 3.744)
- 6. Seshasai Srinivasan and M. Ziad Saghir, "Thermo-Solutal-Diffusion In High Pressure Liquid Mixtures In the Presence of Micro-Vibrations", International Journal of Thermal Sciences, Vol. 49, pp. 1613-1624, 2010. (My role: 1f, 2f, 3m). (Impact Factor: 3.744)
- Seshasai Srinivasan and M. Ziad Saghir, "Significance of Equation of State and Viscosity on the Thermodiffusion Coefficients of a Ternary Hydrocarbon Mixture", Journal of High Temperatures-High Pressures, Vol. 39, pp. 65–81, 2010. (My role: 1f, 2f, 3m). (Impact Factor: 0.424)
- Guillaume Galliero, Seshasai Srinivasan and M. Ziad Saghir, "Estimation of Thermodiffusion in Ternary Alkane Mixtures Using Molecular Dynamics and the Irreversible Thermodynamic Theory", Journal of High Temperatures-High Pressures, Vol. 38, pp. 315–328, 2010. (My role: 1e, 2e, 3m). (Impact Factor: 0.424)
- 3. Franz X. Tanner and Seshasai Srinivasan,"Computational Optimization of Fuel Injection Strategies in a Diesel Engine Using an Adaptive Gradient Method", Journal of Applied Mathematical Modeling, Vol. 33, No. 3, pp. 1366-1385, 2009. (My role: 1f, 2f, 3e). (Impact Factor: 5.129)
- 2. Seshasai Srinivasan and M. Ziad Saghir, "Experimental Data on Thermodiffusion in Ternary Hydrocarbon Mixtures", Journal of Chemical Physics, Vol. 131, pp. 124508, 2009. (My role: 1f, 2f, 3m). (Impact Factor: 3.48)
- Van Vaerenbergh, Seshasai Srinivasan and M. Ziad Saghir, "Thermodiffusion in Multi-Component Hydrocarbon Mixtures: Experimental Investigations and Computational Analysis", Journal of Chemical Physics, Vol. 131, pp. 114505, 2009. (My role: 1f, 2f, 3m). (Impact Factor: 3.48)

#### Other, Including Proceedings of Meetings - Pedagogical Research

- Dan Centea and Seshasai Srinivasan. "Design of a Vehicle for Modern Mobilities in Metropolitan Areas. "Proceedings of the 24th International Conference on Interactive Collaborative Learning ICL2021.Conference 2021. 22-24 September 2021, Dresden, Germany.
- Gaganpreet Sidhu, Seshasai Srinivasan and Dan Centea. "Lessons Learnt in an Online Teaching Environment, and Cues for the Future." Proceedings of the 24th International Conference on Interactive Collaborative Learning -ICL2021.Conference 2021. 22-24 September 2021, Dresden, Germany.
- Marjan Alavi and Seshasai Srinivasan. "Introduction of Online Labs to Enhance the Quality of the Real-time Systems Course." Proceedings of the International Conference on Interactive Mobile Communication, Technologies and Learning. 4–5 November 2021, Thessaloniki, Greece.
- Moein Mehrtash, Amin Rajabzadeh and Seshasai Srinivasan. "Multidisciplinary Problem-based Learning (MPBL) Approach in Undergraduate Programs. "Proceedings of the International Conference on Interactive Mobile Communication, Technologies and Learning. 4–5 November 2021, Thessaloniki, Greece.
- Steven Bogoslowski, Fei Geng, Seshasai Srinivasan, Zhen Gao and Amin Rajabzadeh. "The Development Of iThink Project-Based Learning For Online Engineering Education." Proceedings of the International Conference on Interactive Mobile Communication, Technologies and Learning. 4–5 November 2021, Thessaloniki, Greece.
- Jeff Fortuna and Seshasai Srinivasan"Course Conversion from Face-To-Face to Online for Technical Courses", Proceedings of 2018 International Conference on Interactive Mobile Communication, Technologies and Learning (IMCL2018), Hamilton, Canada. pp. 129-138, 2018. (My role: 3s).
- Gaganpreet Sidhu and Seshasai Srinivasan, "An Efficient Grading Strategy for Large Classes", ICTEA2016, Proceedings of the 9th International Conference on Thermal Engineering, Abu Dhabi United Arab Emirates, 2016. (My Role: PI and Supervisor).

# Other, Including Proceedings of Meetings - Domain Research

- 23. *Srikumar Balasubramanian, Gaganpreet Sidhu* and Seshasai Srinivasan, "Use of Artificial Intelligence for Injection Control Systems". ICTEA 2020, Proceedings of the 13th International Conference on Thermal Engineering: Theory and Applications, Baku, Azerbaijan, 2020. (My Role: PI and Supervisor).
- Gaganpreet Sidhu and Seshasai Srinivasan, "An Intelligent Algorithm for Designing High Carbon Bainitic Steels". ICTEA 2020, Proceedings of the 13th International Conference on Thermal Engineering: Theory and Applications, Baku, Azerbaijan, 2020. (My Role: PI and Supervisor).
- 21. **Ramavtar Tyagi** and Seshasai Srinivasan, "Molecular Dynamics Modelling of Li-Ion Intercalation Induced Thermal Diffusion in LixMn2O4 Material". ICTEA 2020, Proceedings of the 13th International Conference on Thermal Engineering: Theory and Applications, Baku, Azerbaijan, 2020. (My Role: PI and Supervisor).
- 20. *Gaganpreet Sidhu*, Seshasai Srinivasan and Sanjeewan Bhole, Microstructural Analysis of Heat Treated Steels, ICTEA 2019, Proceedings of the 12th International Conference on Thermal Engineering: Theory & Applications, Gandhinagar, Gujarat, India, 2019. (My Role: PI and Supervisor).
- 19. *Gaganpreet Sidhu*, Seshasai Srinivasan and M. Ziad Saghir, Computational Analysis of Thermodiffusion in Ternary Liquid Mixtures, ICTEA 2019, Proceedings of the 12th International Conference on Thermal Engineering: Theory & Applications, Gandhinagar, Gujarat, India, 2019. (My role: PI and Supervisor).
- Gaganpreet Sidhu, Seshasai Srinivasan and Sanjeewan Bhole, "A Model For Bainite Formation at Isothermal Temperatures", ICTEA2018, Proceedings of the 11th International Conference on Thermal Engineering, Doha - Qatar, 2018. (My Role: PI and Supervisor).
- 17. *Patrick Rushton*, Seshasai Srinivasan and *Gaganpreet Sidhu*, "A Real-time Injection Control System for Transient Operation of IC Engines", ICTEA2017, Proceedings of the 10th International Conference on Thermal Engineering, Muscat Oman, 2017. (My Role: PI and Supervisor).
- Seyedeh Hoda Mozaffari, Seshasai Srinivasan and M. Ziad Saghir, "Estimation of Thermodiffusion Factor for Binary Hydrocarbon Mixtures Using an Enhanced Non-Equilibrium Molecular Dynamics Algorithm", ICTEA2017, Proceedings of the 10th International Conference on Thermal Engineering, Muscat - Oman, 2017. (My Role: Co-PI and Supervisor).
- 15. *Gaganpreet Sidhu*, Seshasai Srinivasan and Sanjeewan Bhole, "A Heuristic Algorithm For Optimal Design and Thermomechanical Processing of High Carbon Bainitic Steels", ICTEA2017, Proceedings of the 10th International Conference on Thermal Engineering, Muscat Oman, 2017. (My Role: Co-PI and Supervisor).
- 14. Seyedeh Hoda Mozaffari, Seshasai Srinivasan and M. Ziad Saghir, "Evaluation of Molecular Dynamics Methods for Thermodiffusion in Binary Mixtures", ICTEA2016, Proceedings of the 9th International Conference on Thermal Engineering, Abu Dhabi United Arab Emirates, 2016. (My role: Co-PI and Supervisor).
- 13. *Gaganpreet Sidhu, Roustam Pallonji*, and Seshasai Srinivasan, "Molecular Dynamics Simulations of Ion-Pairing in Electrochemical Fluids", ICTEA2016, Proceedings of the 9th International Conference on Thermal Engineering, Abu Dhabi United Arab Emirates, 2016. (My Role: PI and Supervisor)
- Jan Macek, Vit Dolecek, Oldrich Vitek, Seshasai Srinivasan and Franz X. Tanner, "Optimization of Engine Control Strategies During Transient Processes Combining 1-D and 3-D Approaches", SAE paper 2010-01-0783, 2010. (My Role: 1e, 2e, 3s).
- 11. Seshasai Srinivasan, Franz X. Tanner, Kathleen Feigl and Erich Windhab, "Development of a Solidification Model for Food Sprays", 8<sup>th</sup> World Congress of Chemical Engineers, Series-Food Processing & Emerging Trends, Vol. FPET1, Montreal, Canada, 2009. (My Role: 1f, 2f, 3f).
- Jan Macek, Oldrich Vitek, Vit Dolecek, Seshasai Srinivasan and Franz X. Tanner, "Improved Simulation of Transient Engine Operations at Unsteady Speed Combining 1-D and 3-D Modeling", SAE paper 2009-01-1109, 2009. (My Role: 1e, 2m, 3s).
- 9. Seshasai Srinivasan and Christopher Rutland, "Thermal and EGR Component Effects on the Combustion of n-Heptane Fuel", SAE paper 2008-01-0951, 2008. (My Role: 1f, 2f, 3f).

- 8. Jan Macek, Milos Polacek, Oldrich Vitek, Seshasai Srinivasan and Franz Tanner, "1-D Modeling of Transient Engine Operations Using Data Generated by a CFD Code", SAE paper 2008-01-0357, 2008. (My Role: 1e, 2e, 3s).
- Franz Tanner and Seshasai Srinivasan, "Optimization of Asynchronous Fuel Injection System in Diesel Engines by Means of a Micro-Genetic Algorithm and an Adaptive Gradient Method", SAE paper 2008-01-0925, 2008. (My Role: 1f, 2f, 3f).
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