# Overall List of publications and Patents (Prof. Srinivas Krishnaswamy: PSRN G0068; Goa campus)

## **POST JOINING BITS PILANI**

<u>Total Publications</u>: 16 in journals and 2 in Conference Proceedings

\*Scopus Metrics: h-index 7; Citations 138; Highest SNIP: 2.498

\*Web of Science: h-index 6; Citations: 92; Highest IF: 9.9

Google Scholar: h-index 7; Citations: 175; i-10 index: 6

\*as per Researgence

## Journal Publications

- 1. Pragya Singh, Srinivas Krishnaswamy, K.N. Ponnani, Ankur Verma, Jaya Rawat, "Corrosion fouling during crude oil flow on a heated surface: Effects of temperature, shear and material of construction", Heat and Mass Transfer Journal, Springer, July 2023.
- Vinod Kadu More, Srinivas Krishnaswamy, Madan Kumar Singh; "Comparative studies on simultaneous chlorination of LDPE and PP in paraffin", Materials Today: Proceedings, 72, 2719-2719, January 2023 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 1.46; H-Index: 56) (published in this journal post presentation of our work in Advances in Chemical Engineering and Science (ACES-2022) at IIT Roorkee)
- 3. **Srinivas Kri**shnaswamy, Parul Sahu, Krishnaswamy Ponnani; "Calorimetry based temperature and specific enthalpy measurements associated with ice-water phase change in saline systems for freeze desalination", International Journal of Thermofluids, 15, June 2022 **(Elsevier)**
- 4. Pragya Singh, **Srinivas Krishnaswamy**, Krishnaswamy Ponnani, Ankur Verma, Jaya Rawat; "Crude Oil Foulant Deposition Studies on a Heated Surface Using a Novel Batch Stirred Coupon Test Rig", International Journal of Chemical Engineering, 2022, May 2022 (Hindawi; Corresponding author; Scopus indexed; Impact factor: 2.729; H-Index: 29; Quartile 2)
- Vinod More, Srinivas Krishnaswamy\*, Ponnani Krishnaswamy, Madan Singh;" Cochlorination of low-density polyethylene in paraffin: An intensified green process alternative to conventional solvent-based chlorination", Green Processing and Synthesis, 11, 842-856, February 2022 2022 (De Gruyter; Corresponding author; Scopus indexed; Impact factor: 3.970; H-Index: 27; Quartile 2)
- 6. Siva Varigala, **Srinivas Krishnaswamy**, Chandra P Lohia, Meghan Hegarty-Craver, Sonia Grego, Michael Luettgen, Clement A Cid; "Optimal design of an electrochemical reactor for blackwater treatment", Water Environment Research, 93, 148-158, January 2021 (Wiley; Scopus indexed; Impact factor: 2.91; H-Index: 77; Quartile 2)

- 7. Parul Sahu, **Srinivas Krishnaswamy**, Nawal Kishore Pande; "Process Intensification using a novel continuous U-shaped Crystallizer for Freeze Desalination", Chemical Engineering and Processing-Process Intensification, 153, 107970, May 2020 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 4.237; H-Index: 103; Quartile 1)
- 8. Claire M Welling, Siva Varigala, **Srinivas Krishnaswamy**, Antony Raj, Brendon Lynch, Jeffrey R Piascik, Brian R Stoner, Brian T Hawkins, Meghan Hegarty-Craver, Michael J Luettgen, Sonia Grego; "Resolving the relative contributions of cistern and pour flushing to toilet water usage: Measurements from urban test sites in India", Science of The Total Environment, April 2020 (Elsevier; Scopus indexed; Impact factor: 10.75; H-Index: 275; Quartile 1)
- 9. Siva Kumar Varigala, Meghan Hegarty-Craver, **Srinivas Krishnaswamy**, Prakash Madhavan, Milan Basil, Praveen Rosario, Antony Raj, Viswa Barani, Clement A Cid, Sonia Grego, Michael Luettgen; "Field testing of an onsite sanitation system on apartment building blackwater using biological treatment and electrochemical disinfection", Environmental Science: Water Research & Technology, 6, 1400-1411, 2020 (Royal Society of Chemistry; Scopus indexed; Impact factor: 5.819; H-Index: 45; Quartile 1)
- Parul Sahu, Srinivas Krishnaswamy, Krishnaswamy Ponnani, Nawal Kishore Pande; "A thermodynamic approach to selection of suitable hydrate formers for seawater desalination", Desalination, 436, 144-151, June 2018 2020 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 9.501; H-Index: 203; Quartile 1)
- 11. Amol Deshpande, **Srinivas Krishnaswamy**, Krishnaswamy Ponnani; " Corrigendum to Experimental investigations on unmixed combustion for heat transfer applications", Chemical Engineering Science, 192, 1260 -1260, 2018 2020 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 4.889; H-Index: 186; Quartile 1)
- 12. **Srinivas Krishnaswamy**, Amol Deshpande, KN Ponnani; "Modeling of unmixed combustion based packed bed reactor system for heat transfer applications", Chemical Engineering Science, 178, 367-376, 2018 (Elsevier; First author; Scopus indexed; Impact factor: 4.889; H-Index: 186; Quartile 1)
- Amol Deshpande, Srinivas Krishnaswamy, Krishnaswamy Ponnani; "Experimental investigations on unmixed combustion for heat transfer applications", Chemical Engineering Science, 1260-1260, 192, 2017 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 4.889; H-Index: 186; Quartile 1)
- 14. Amol Deshpande, Srinivas Krishnaswamy, Krishnaswamy Ponnani; "Pulsed Micro-reactor: An alternative to estimating kinetic parameters of non-catalytic gas—solid reactions", Chemical Engineering Research and Design, 117, 382-393, 2017 (Elsevier; Corresponding author; Scopus indexed)

## Conferences publications

 Pragya Singh, Srinivas Krishnaswamy, Krishnaswamy Ponnani, Ankur Verma, Jaya Rawat; "Characterizing fouling tendency of crude oil on a surface using a High Temperature Variable Shear coupon test rig", 2022 (Manuscript published in Refereed Proceedings of Heat Exchanger fouling and Cleaning Conference XIV, June 5 – 10; Wagrain Austria;

## https://heatexchanger-fouling.com/heat-exchanger-fouling-and-cleaning-xiv-2022/ (ISBN: 978-0-9984188-2-7)

2. Parul Sahu, Srinivas Krishnaswamy, Nawal Kishore Pande, "Heat Transfer with Phase Change in U-Shaped Crystallizer for Freeze Desalination", Twelve International Conference on Thermal Engineering: Theory and Applications, PDPU, Gandhinagar, Gujarat

## Other publications during tenure in BITS Pilani

- Krishnaswamy Ponnani Amol Deshpande, Srinivas Krishnaswamy; "Experimental studies on unmixed combustion-packed bed reactor technology for heat transfer applications", 2015 AIChE Annual Meeting - Transport and Energy Processes, 78-87, 2015, Scopus Indexed conference
- 2. P. V. K. Srikanth, K. N. Ponnani **S. Krishnaswamy**, S. M. Nazir; "Process Condensate Stripper performance in ammonia plants", Nitrogen and Syngas, 2012 (B C Insight; ISSN 1750-6891, (Non-indexed; This work which had to do with fertilizer plants had to be published in this magazine as requested by the funding agency, i.e. Ministry of Fertilizers since the funded had to do with fertilizer plants)
- 3. O. Dixit, **S. Krishnaswamy**, K. Ponnani; "Ammonia Plant Analysis", 2009, (B C Insight; ISSN 1750-6891 (This work which had to do with fertilizer plants had to be published in this magazine as requested by the funding agency, i.e. Ministry of Fertilizers since the funded had to do with fertilizer plants)

## **BEFORE JOINING BITS PILANI**

## <u>Journals</u>

- 1. L. Roselin, R. Selvin, P. Aneesh, M. Bououdina, S. Krishnaswamy; "Highly active and reusable catalyst for Fries rearrangement of phenyl acetate", Kinetics & Catalysis, 52, December 2011 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 1.399; H-Index: 36; Quartile 3)
- 2. **S Krishnaswamy**, HS Wang, JW Rose; "Condensation from gas-vapour mixtures in small non-circular tubes", International journal of heat and mass transfer, 49, 1731-1737, May 2006 (Elsevier; Corresponding author; Scopus indexed; Impact factor: 5.584; H-Index: 208; Quartile 1)

## Conference publications

1. **S Krishnaswamy**, HS Wang, JW Rose; "Condensation from gas-vapour mixtures in small non-circular tubes", Proceedings of Fifth International Conference on Enhanced, Compact and Ultra-Compact Heat Exchangers: Science, Engineering and Technology; 329-334; 2005

## **INFORMATION ON PATENTS (IN BITS PILANI)**

Total Patents filed: 4

All the 4 patents have been published

2 of the 4 patents have been examined and responses provided. 2 patents have been granted.

## **DETAILS**

1. India – Patent Application No.: 201811014242

Date of filing: April 13, 2018

Title: Process and system for routing LNG cold energy for desalination seawater and power

generation

Inventors: Srinivas Krishnaswamy, Sahu Parul, Ponnani Krishnaswamy Neelakantan,

Parivesh Chugh, Nawal Kishore Pande

Applicants: Birla Institute of Technology & Science (BITS), Pilani and GAIL (India) Limited

**Status: GRANTED** 

2. India – Patent Application No.: 201921016099

Date of filing: April 23, 2019

**Title:** A process and apparatus for continuous freeze crystallization

Inventors: Srinivas Krishnaswamy, Sahu Parul, Ponnani Krishnaswamy Neelakantan,

Parivesh Chugh, Nawal Kishore Pande

Applicants: Birla Institute of Technology & Science (BITS), Pilani and GAIL (India) Limited

**Status: GRANTED** 

3. India - Patent Application No.: 201911011261

Date of filing: March 22, 2019

**Title:** A co-chlorination process for paraffins and polyolefins

Inventors: Srinivas Krishnaswamy, More Vinod Kadu, Singh Madan Kumar, Ganvir Vivek,

Ponnani Krishnaswamy

Applicants: Birla Institute of Technology & Science (BITS), Pilani and Aditya Birla Science &

Technology Co. Pvt. Ltd.

**Status: GRANTED** 

4. India – Patent Application No.: 202011006181

Date of filing: February 12, 2020

**Title:** An apparatus to determine the fouling tendency of a liquid under dynamic conditions **Inventors:** Singh Pragya, Krishnaswamy Srinivas, Ponnani K. N., Rawat Jaya, Verma Ankur **Applicants:** Birla Institute of Technology & Science (BITS), Pilani and Bharat Petroleum Corporation Limited

Status: PUBLISHED