

Arun Karthick. R

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PROFILE:

- Exceptionally dynamic and motivated Ph.D. candidate with proven research expertise in nano materials, pharmaceutical formulations and biological assay. Resilient personality with high technical skills.

EDUCATION : Ph.D. Chemical Engineering, 2014-2020
Birla Institute of Technology and Science (Pilani Campus), Pilani-33031. Rajasthan, India.
M.Tech. Pharmaceutical Technology, 2012-2014
SASTRA University, Thanjavur - 613401. Tamilnadu, India.
B.Tech. Biotechnology, 2008-2012
Kalasalingam university, Krishnan Kovil-626126, Tamilnadu, India.

Ph.D. Thesis : Characterization and application of surfactant foams

RESEARCH : Surface chemistry, Pharmaceuticals, Formulations, API, Drug Delivery, Analytical techniques,

INTERESTS Nano materials, Immunological techniques, Bacterial cell culture, Biological assay development, Serum analysis. Process design and development, Process optimization.

SCHOLARSHIPS/AWARDS:

- Received WARI Fellowship from DST-IUSSTF, for six months at Univ. of Nebraska-Lincoln, USA 2020.
- Received Summer Research Fellowship from Indian Academy Of Science to work at National Centre for Cell Science, Pune in 2012 (May - June).
- Certification course in Advanced Molecular Biology from Sengenomics Bangalore.
- Cleared level B1 Business English Certificate examination conducted by University of Cambridge in March 2011.

PUBLICATIONS:

- Arun Karthick, R.;** Ramya Devi, D.; Vedha Hari, B. N. Investigation of Sustained Release Mucoadhesive In-Situ Gel System of Secnidazole for the Persistent Treatment of Vaginal Infections. *Journal of Drug Delivery Science and Technology*. 2018, 43, 362-368. **(Impact Factor: 2.606)**
- Arun Karthick, R.;** Ramya Devi, D.; Vedha Hari, B. N. Vaginitis: Recent formulation approaches of anti-infectious drugs. *Jinternational Journal of Pharma and Bioscience*. 2014, 5, 212-218. **(Impact Factor: 3.406)**
- Arun Karthick, R.;** Roy, B.; Chattopadhyay, P. A review on the application of chemical surfactant and surfactant foam for remediation of petroleum oil contaminated soil. *Journal of Environmental Management*. 2019, 243, 187-205. **(Impact Factor: 5.647)**
- Arun Karthick, R.;** Roy, B.; Chattopadhyay, P. Comparison of Zero-Valent Iron and Iron Oxide Nanoparticle Stabilized Alkyl Polyglucoside Phosphate Foams for Remediation of Diesel-Contaminated Soils. *Journal of Environmental Management*. 2019, 240, 93-107. **(Impact Factor: 5.647)**
- Arun Karthick, R.;** Chauhan, M.; Krzan, M.; Chattopadhyay, P. Potential of Surfactant Foam Stabilized by Ethylene Glycol and Allyl Alcohol for the Remediation of Diesel Contaminated Soil. *Environmental Technology & Innovation*. 2019, 14, 100363. **(Impact Factor: 3.356)**

INTERNATIONAL CONFERENCES:

- Arun Karthick. R, Pradipta Chattopadhyay, "Remediation of Diesel Contaminated Soil by Tween-20 Foam stabilized by Silica Nanoparticles", Proceedings of 4th International Conference on Chemical and Food Engineering (ICCFE 2017), Osaka, Japan, March 28-30, 2017.
- Pradipta Chattopadhyay, Arun Karthick. R, "Characterization and Application of Surfactant Foams Produced from Ethanol-Sodium Lauryl Sulfate-Silica Nanoparticle Mixture for Soil Remediation", Abstract in Proceedings of 2nd International Conference on Soft Materials (ICSM-2016), Jaipur, India, December 12-16, 2016.
- Pradipta Chattopadhyay, Arun Karthick. R, Venkata Vijayan, Soumya Chowdhury, "Optimum Dodecanol-detergent foam performance for formulation of eco-friendly surfactants", Proceedings of World Research

Journals Conference (WRC 2015), Dubai, UAE, 7-9th December, 2015.

ENGINEERING RESEARCH EXPERIENCE:

Immunobiology and molecular research lab, Serum Institute of India Ltd, Pune, India

Research Project Trainee (July-Dec 2011)

Characterization & use of bacterial strains in serum bactericidal assay

Birla Institute of Technology and Science, Pilani, India.

Junior Research Fellow (2014-2017).

Evaluation and enhancement of foam stability of ethanol based aqueous foam using commercial surfactant sodium lauryl sulfate.

SASTRA University, Thanjavur, India

M.Tech Project Student (2012-2014)

Design and development of vaginal drug delivery systems of Secnidazole.

TEACHING EXPERIENCE

Birla Institute of Technology and Science, Chemical engineering department

Tutorial Instructor - Engineering Chemistry

Teaching Assistant - PDP-I and PDP-II

PERSONAL DETAILS

Name : R. Arun Karthick

Gender : Male

Date of Birth : 14-08-1990

Nationality : Indian

Marital Status : Married

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REFERENCES

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Assistant Professor,

Department of Chemical Engineering,

Birla Institute of Technology and Science (BITS), Pilani Campus,

Pilani 333031, Rajasthan, India

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