| NAME | Dr. A.S.M.Raja |
|-------------------------------|--|
| DESIGNATION | Principal Scientist |
| DEPARTMENT | Textile Chemistry |
| NAME OF ORGANISATION | Central Institute for Research on Cotton Technology |
| PLACE | Mumbai |
| PINCODE | 400019 |
| AFFILIATED TO ANNA UNIVERSITY | No |
| MOBILE | 8767952731 |
| E-MAIL | Raja.ASM@icar.gov.in |
| AREA OF SPECIALISATION | Absorbent cottonChemical testing |
| | Innovative sustainable dyeing and finishing process, |
| | Natural dyes |
| | |
| | |
| PUBLICATION | |

PUBLICATIONS FOR LAST FIVE YEARS

- 1. **Raja**, **A. S. M.**, Arputharaj, A., Saxena, S., & Patil, P. G. (2016). A One bath chemo-enzymatic process for preparation of absorbent cotton, *Perspectives in Science*.in press.doi:10.1016/j.pisc.2016.04.043.
- 2. Krishna Prasad, G., Periyasamy, S., Chattopadhyay, S.K., **Raja, A.S.M.,** Rajkumar, K. and Santosh Jagadale (2016). Surface modification of nylon fabric and its optimization for improved adhesion in rubber composites, Journal of the Textile Institute (Accepted for publication)
- 3. Periyasamy, S., Krishna Prasad, G., Chattopadhyay, S.K., **Raja, A.S.M.,** Raj Kumar, K. and Jagadate, S. (2016) Micro roughening of polyamide fabric using protease enzyme for improving adhesion strength of rubber-polyamide composite, Journal of Polymer Engineering (accepted for publication; NASS rating 6.47).
- 4. Arputraj, A., Saxena, S., **Raja, A.S.M.,** Kawalekar, S.R., Patil, P.G., and Samanta, K.K., (2016) Atmospheric Pressure Plasma Assisted Process for the Processing of denim Materials, Cotton Research Journal 7 (1), 67-70.
- 5. **Raja, A.S.M.,** Arputraj, A., Saxena, S. and Patil, P.G. Single bath enzymatic scouring and bleaching process for preparation of absorbent cotton, Indian Journal of Fibre & Textile Research Vol. 42, June 2017, pp. 202-208. (NAAS rating 6.430) (Impact Factor 0.430).
- Ajay Kumar, ASM Raja, DB Shakyawar, PK Pareek, D Krofa(2015) "Efficacy of natural dye from Gerardiana diversifolia on pashmina (Cashmere) shawls", Indian Journal of Fibre & Textile Research (IJFTR), Vol. 40, Issue 4, PP. 180-183.
- 7. Ajay Kumar, PK Pareek, **ASM Raja**, DB Shakyawar(2015) "Extraction from babul (Acacia nilotica) bark and efficacy of natural colour on woollen yarn", Indian Journal of Small Ruminants, Vol.21, No.21, PP. 92-95
- 8. Syed Maqbool Geelani, Shoukat Ara, Sarfaraz A Wani, **ASM Raja**, et.al., (2015) "Eco-friendly dyeing of wool and pashmina fabric using Quercus robur L. (fruit cups) dye and Salix alba L. (wood extract) mordant", Journal of Applied and Natural Science, Vol. 7, No. 1, PP. 138-143.
- Rajiv Kumar, DB Shakyawar, PK Pareek, ASM Raja, et.al., (2015) "Development of PCR-based technique for detection of purity of pashmina fiber from textile materials", Applied biochemistry and biotechnology, Vol.175, No.8, PP.3856-3862.
- 10. S Periyasamy, G Krishna Prasad, Sajal Kumar Chattopadhyay, **ASM Raja**, K Raj Kumar, Santosh Jagadale(2017) "Micro-roughening of polyamide fabric using protease enzyme for improving adhesion strength of rubber-polyamide composite", Journal of Polymer Engineering, Vol. 37, No. 3, PP. 297-306.
- 11. Siddhan Periyasamy, **Raja ASM**, Prashant G Patil(2018) "Submicron surface roughening of aliphatic polyamide 6, 6 fabric through low temperature plasma and its effect on interfacial bonding in rubber composite", Journal of Industrial Textiles, Vol. 47, No. 8, PP. 2029-2049.
- 12. AM Mhatre, **ASM Raja**, Sujata Saxena, PG Patil(2019) "Environmentally benign and sustainable green composites: current developments and challenges", Green composites, PP. 53-90.

- 13. **ASM Raja**, A Arputharaj, Sujata Saxena, PG Patil(2019) "Water requirement and sustainability of textile processing industries", Water in textiles and fashion, PP. 155-173.
- 14. DB Shakyawar, **ASM Raja**, SA Wani, VV Kadam, PK Pareek(2015) "Low-stress mechanical properties of pashmina shawls prepared from pure hand spun, machine spun and pashmina-wool blend yarn", The Journal of the Textile Institute, Vol.106, No.3, PP.327-333.
- 15. A Arputharaj, **ASM Raja**, Sujata Saxena(2016) "Developments in sustainable chemical processing of textiles", Green fashion, PP. 217-252.
- 16. Sujata Saxena, **ASM Raja**, A Arputharaj(2017) "Challenges in sustainable wet processing of textiles", Textiles and clothing sustainability, PP.43-79.
- 17. **ASM Raja** and P G Patil G Krishna Prasad, S Periyasamy, T Senthilkumar (2019) "A Review on Surface Modification of Textile Substrate Using Plasma to Improve Interfacial Bonding with Rubber Matrix", Chemical Science Review and Letters, Vol. 8, No. 30, pp. 179-184
- 18. Yamini Tak Manoj Kumar, Sujata Saxena, **Raja A.S.M.**, P.G. Patil(2019) "Water Pollution from Wet Processing of Cotton-Based Textiles and Strategies for Its Mitigation: A Review", Cotton Research Journal, Vol. 8. No. 2, pp. 71-74.
- 19. Aparajita Patra, **ASM Raja** and Narendra Shah(2019) "Current developments in (Malaria) mosquito protective methods: A review paper", International Journal of Mosquito Research, Vol.6.No.1, PP.38-45.
- 20. **ASM Raja,** A Arputharaj, G Krishnaprasad, Sujata Saxena, PG Patil(2021)"Challenges in dyeing of cellulosics with reactive dyes and practical sustainable feasibilities", Chemical Management in Textiles and Fashion,pp.79-98.
- 21. Vinod Kadam, Sajal K Chattopadhyay, **ASM Raja**, DB Shakyawar(2021) "Waste Management in the Fashion and Textile Industries", Woodhead Publishing, PP. 215-231.