

Stanford

Anjani Maurya

Postdoctoral Scholar, Photon Science, SLAC

Bio

BIO

Anjani K. Maurya studied bachelor of technology (B.Tech) in engineering physics at the Indian Institute of Technology Guwahati, India, and masters in materials science exploring large-scale facilities at the University of Rennes 1, France, and the Technical University of Munich, Germany, in the framework of Erasmus Mundus program. He worked at the center for X-ray analytics and the laboratory for biomimetic membranes and textiles at Swiss Federal Laboratories for Materials Science and Technology (Empa) and obtained his Ph.D. in Biomedical Engineering from the University of Bern, Switzerland.

HONORS AND AWARDS

- Best poster presentation award, EXCITE Biomedical Imaging Summer School, ETH Zurich, Switzerland (Sept-2018)
- IUCr Young Scientist Award, EPDIC-2020 (May-2020)
- Young Scientist Award to attend the conference, SAS2022 (July-2022)
- Erasmus+ Scholarship, European Union (2015-2016)
- World Quantitative and Science Scholarship, World Quant Foundation (2014-2015)
- IIT Guwahati Institute Merit-cum-Means (McM) Scholarship, Government of India (2012-2014)

STANFORD ADVISORS

- Piero Pianetta, Postdoctoral Faculty Sponsor

Research & Scholarship

RESEARCH INTERESTS

- Curriculum and Instruction
- Data Sciences
- Professional Development
- Research Methods
- Science Education

Publications

PUBLICATIONS

- **Superinsulating nanocellulose aerogels: Effect of density and nanofiber alignment.** *Carbohydrate polymers* Sivaraman, D., Siqueira, G., Maurya, A. K., Zhao, S., Koebel, M. M., Nystrom, G., Lattuada, M., Malfait, W. J. 2022; 292: 119675
- **Redesigned Hybrid Nylons with Optical Clarity and Chemical Recyclability.** *Journal of the American Chemical Society* Cywar, R. M., Rorrer, N. A., Mayes, H. B., Maurya, A. K., Tassone, C. J., Beckham, G. T., Chen, E. Y. 2022

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- **Tailoring Fibre Structure Enabled by X-ray Analytics for Targeted Biomedical Applications** *CHIMIA*
Schoeller, J., Avaro, J., Maurya, A. K., Rossi, R. M., Neels, A.
2022; 76 (3): 229-235
 - **In-situ Investigations on Gold Nanoparticles Stabilization Mechanisms in Biological Environments Containing HSA** *ADVANCED FUNCTIONAL MATERIALS*
Anaraki, N., Liebi, M., Ong, Q., Blanchet, C., Maurya, A. K., Stellacci, F., Salentinig, S., Wick, P., Neels, A.
2021
 - **Understanding multiscale structure-property correlations in PVDF-HFP electrospun fiber membranes by SAXS and WAXS** *NANOSCALE ADVANCES*
Maurya, A. K., Mias, E., Schoeller, J., Collings, I. E., Rossi, R. M., Dommann, A., Neels, A.
2021
 - **Unraveling the Influence of Thermal Drawing Parameters on the Microstructure and Thermo-Mechanical Properties of Multimaterial Fibers.** *Small (Weinheim an der Bergstrasse, Germany)*
Richard, I., Maurya, A. K., Shadman, S., Masquelier, E., Marthey, L. S., Neels, A., Sorin, F.
2021: e2101392
 - **Multiscale and multimodal X-ray analysis: Quantifying phase orientation and morphology of mineralized turkey leg tendons** *ACTA BIOMATERIALIA*
Maurya, A. K., Parrilli, A., Kochetkova, T., Schwiedrzik, J., Dommann, A., Neels, A.
2021; 129: 169-177
 - **Effect of radiant heat exposure on structure and mechanical properties of thermal protective fabrics** *POLYMER*
Maurya, A. K., Mandal, S., Wheeldon, D. E., Schoeller, J., Schmid, M., Annaheim, S., Camenzind, M., Fortunato, G., Dommann, A., Neels, A., Sadeghpour, A., Rossi, R. M.
2021; 222
 - **Template-free synthesis of hybrid silica nanoparticle with functionalized mesostructure for efficient methylene blue removal** *MATERIALS & DESIGN*
Parida, D., Salmeia, K. A., Sadeghpour, A., Zhao, S., Maurya, A. K., Assaf, K. I., Moreau, E., Pauer, R., Lehner, S., Jovic, M., Cordula, H., Gaan, S.
2021; 201
 - **Polyhydroxyoctanoate films reinforced with titanium dioxide microfibers for biomedical application** *MATERIALS LETTERS*
Malagurski, I., Frison, R., Maurya, A. K., Neels, A., Andjelkovic, B., Senthamaikannan, R., Babu, R. P., O'Connor, K. E., Witko, T., Solarz, D., Nikodinovic-Runic, J.
2021; 285
 - **Combining polarized Raman spectroscopy and micropillar compression to study microscale structure-property relationships in mineralized tissues** *ACTA BIOMATERIALIA*
Kochetkova, T., Peruzzi, C., Braun, O., Overbeck, J., Maurya, A. K., Neels, A., Calame, M., Michler, J., Zysset, P., Schwiedrzik, J.
2021; 119: 390-404
 - **Responsive Nanofibers with Embedded Hierarchical Lipid Self-Assemblies** *LANGMUIR*
Tien, N. D., Maurya, A. K., Fortunato, G., Rottmar, M., Zboray, R., Erni, R., Dommann, A., Rossi, R. M., Neels, A., Sadeghpour, A.
2020; 36 (40): 11787-11797
 - **Polarimetric imaging in backscattering for the structural characterization of strongly scattering birefringent fibrous media** *OPTICS EXPRESS*
Jain, A., Maurya, A. K., Ulrich, L., Jaeger, M., Rossi, R. M., Neels, A., Schucht, P., Dommann, A., Frenz, M., Akarcay, H.
2020; 28 (11): 16673-16695
 - **Structural insights into semicrystalline states of electrospun nanofibers: a multiscale analytical approach** *NANOSCALE*
Maurya, A. K., Weidenbacher, L., Spano, F., Fortunato, G., Rossi, R. M., Frenz, M., Dommann, A., Neels, A., Sadeghpour, A.
2019; 11 (15): 7176-7187
 - **Facile Optimization of Thermoelectric Properties in PEDOT:PSS Thin Films through Acido-Base and Redox Dedoping Using Readily Available Salts** *ACS APPLIED ENERGY MATERIALS*
Saxena, N., Keilhofer, J., Maurya, A. K., Fortunato, G., Overbeck, J., Mueller-Buschbaum, P.
2018; 1 (2): 336-342