

## Contact

[www.linkedin.com/in/radha-boya-2a183826](https://www.linkedin.com/in/radha-boya-2a183826) (LinkedIn)

## Top Skills

Nanofabrication

Soft Lithography

Scanning Electron Microscopy

## Publications

Cantilever-free Dot-Matrix Nanoprinting

The role of viscosity on the polymer ink transport in dip-pen nanolithography

Reconstitutable Nanoparticle Superlattices.

Large-Area Molecular Patterning with Polymer Pen Lithography

Tuning the Spring Constant of Cantilever-Free Tip Arrays

## Patents

Layer by Layer Lithography

# Radha Boya

FRSC, Professor of nanoscience, Royal Society URF and Kathleen Ollerenshaw Fellow at The University of Manchester  
Manchester, England, United Kingdom

## Summary

Radha Boya FRSC is working at the University of Manchester as a Royal Society URF and leads angstrofluidics group. Here is our awesome research group: <https://radhaboya.weebly.com/>

Our current work at Manchester is related to atomic scale capillaries with 2D-materials.

### Expertise:

Nanofabrication, Clean room skills, Etching, Photolithography, e-beam lithography, nanoimprint and soft lithography, X-ray diffraction, thermal gravimetric analysis, differential scanning calorimetry, absorption and emissions spectroscopy

Radha's PhD work pertains to patterned synthesis of functional nanomaterials on surfaces using direct-write methods. I have ample experience in chemical solution synthesis of nanomaterials in the form of thin films and patterns. During Postdoctoral research with Chad A Mirkin's group, she has developed the skills of DNA nanotechnology for assembling nanoparticles.

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## Experience

### Royal Society of Chemistry

Fellow of the Royal Society of Chemistry  
March 2021 - Present (2 years 3 months)

### The University of Manchester

4 years 8 months

### Professor of nanoscience

April 2020 - Present (3 years 2 months)  
Manchester, England, United Kingdom

Precise angstrom-scale channels made from 2D materials; unconventional nanochannel fabrication

Royal Society University Research Fellow  
October 2018 - Present (4 years 8 months)  
Manchester, England, United Kingdom

The University of Manchester  
Leverhulme Early Career Fellow  
October 2016 - February 2018 (1 year 5 months)

The University of Manchester  
Marie Curie Fellow  
May 2014 - April 2016 (2 years)  
Condensed Matter Physics Group  
Research Topic: Graphene and 2D-layered heterostructures

Northwestern University  
Postdoctoral Fellow at Chad Mirkin's lab  
August 2012 - December 2013 (1 year 5 months)  
Northwestern University, Evanston IL  
Work Group: Prof. Chad A Mirkin  
Research Topic: DNA mediated assembly of nanoparticles on surfaces for plasmonic circuitry  
Experienced in DNA synthesis, and a wide variety of instrumentation, example PXRD, SEM, AFM, GISAXS.

Northwestern University  
Pre doctoral fellow  
March 2012 - June 2012 (4 months)

JNCASR  
PhD student  
August 2007 - March 2012 (4 years 8 months)  
Research Group: Prof G U Kulkarni

Research topic: Patterned synthesis of functional nanomaterials on surfaces using direct-write methods.

Experienced in nanofabrication with clean room skills, etching, photolithography, e-beam lithography, nanoimprint and soft lithography, X-ray diffraction, thermal gravimetric analysis, differential scanning calorimetry, absorption and emissions spectroscopy

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## Education

Jawaharlal Nehru Centre for Advanced Scientific Research

Doctor of Philosophy (Ph.D.), Materials Science · (2007 - 2012)

Sri Krishnadevaraya University

Master of Science (MSc), Chemistry · (2005 - 2007)