

Senior Research Fellow (Materials Science/ Chemical
Engineering/Physics)
Nanyang Technological University

Direct Link: <https://www.AcademicKeys.com/r?job=256072>

Downloaded On: Aug. 10, 2025 4:22am

Posted Apr. 21, 2025, set to expire Aug. 21, 2025

Job Title	Senior Research Fellow (Materials Science/ Chemical Engineering/Physics)
Department	NTI-NTU Corporate Laboratory
Institution	Nanyang Technological University Singapore, , Singapore
Date Posted	Apr. 21, 2025
Application Deadline	Open untill filled
Position Start Date	Available Immediately
Job Categories	Research Scientist/Associate
Academic Field(s)	Materials Sciences/Polymer Sciences
Job Website	https://ntu.wd3.myworkdayjobs.com/Careers/job/NTU-Main-Campus-Singapore/Senior-Research-Fellow--Materials-Science--Chemical-Engineering-Physics-_R00020458
Apply Online Here	https://ntu.wd3.myworkdayjobs.com/Careers/job/NTU-Main-Campus-Singapore/Senior-Research-Fellow--Materials-Science--Chemical-Engineering-Physics-_R00020458
Apply By Email	
Job Description	

NTI-NTU Corporate Laboratory is a collaboration between Nanofilm Technologies International Limited (“Nanofilm”, “NTI”), Nanyang Technological University (“NTU”) and supported by Singapore under RIE2025. The Laboratory’s objective is to propel Innovation and Technologies commercialisation

Senior Research Fellow (Materials Science/ Chemical
Engineering/Physics)
Nanyang Technological University

Direct Link: <https://www.AcademicKeys.com/r?job=256072>

Downloaded On: Aug. 10, 2025 4:22am

Posted Apr. 21, 2025, set to expire Aug. 21, 2025

through NTU's innovation and NTU's deep technology. NTU-NTU Corporate Laboratory aligns with Singapore's RIE2025 handbook – which emphasises the nation's commitment to research and innovation, aiming to drive economic growth and address national challenges.

The Nanyang Technological University NTU-NTU Corporate Laboratory is seeking an accomplished and forward-thinking Senior Research Fellow to play a leading role in the development of PVD/CVD-based multi-functional composite thin film coatings. This is a unique opportunity to join a high-impact research team focused on pioneering next-generation materials with strong industrial relevance across electronics, aerospace, automotive, and energy sectors.

The successful candidate will take technical ownership of thin film deposition, materials characterization, and process innovation, contributing both strategic insight and hands-on leadership to research programs at the forefront of plasma processing and surface engineering.

Key Responsibilities:

- Lead the design, optimization, and scale-up of PVD and CVD plasma-based processes, with an emphasis on high-performance composite coatings e.g. oxide and nitride.
- Drive the comprehensive characterization of thin films using advanced techniques (e.g., SEM, XRD, Raman, AFM, nanoindentation), enabling deep understanding of structure-property relationships.
- Spearhead independent, hypothesis-driven experimental research, and interpret complex datasets to extract actionable insights for process refinement and material enhancement.
- Apply advanced data analysis methods, simulation tools, and scientific programming to support process modeling and predictive materials design.
- Translate experimental findings into scalable, commercially viable processes, working closely with internal teams and industrial partners to align with product development goals.
-

Senior Research Fellow (Materials Science/ Chemical
Engineering/Physics)
Nanyang Technological University

Direct Link: <https://www.AcademicKeys.com/r?job=256072>

Downloaded On: Aug. 10, 2025 4:22am

Posted Apr. 21, 2025, set to expire Aug. 21, 2025

Author and present detailed technical reports, white papers, and research documentation to support grant deliverables, IP generation, and strategic decision-making.

- Collaborate across disciplines, mentor junior researchers, and contribute to a culture of technical excellence and continuous innovation.

job Requirements:

- Ph.D. in Materials Science, Chemical Engineering, Physics, or a closely related field.
- At least 5 years of combined specialized post-doctoral experience in industry or a recognized research institute.
- Extensive research experience in the characterization of thin film composite coatings, with a strong emphasis on oxide and nitride composite thin film coatings.
- Applicants must demonstrate effective collaboration skills in multidisciplinary settings.

We regret that only shortlisted candidates will be notified.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Senior Research Fellow (Materials Science/ Chemical
Engineering/Physics)
Nanyang Technological University

Direct Link: <https://www.AcademicKeys.com/r?job=256072>

Downloaded On: Aug. 10, 2025 4:22am

Posted Apr. 21, 2025, set to expire Aug. 21, 2025

Singapore