



SKN
Consultancy



DR. S.K. Nayak
PETROCHEMICAL &
POLYMERS ADVISOR



Dr. Nayak: Innovative Polymer Industry Strategist

- ✓ 37+ Years of Expertise in Polymer Technology - From R&D to real-world industry applications
- ✓ Dual Ph.D - Polymer Sc. & Engg. D.Sc. - Polymer Technology

Project Execution

Regulatory & Policy Compliance

Strategic Planning

Business Transformation

Competitive Intelligence

Collaboration

Market Research & Analysis

Recruitment & Talent Acquisition

Dr. Nayak has spent more than three decades as a Researcher, Trainer & Industry Consultant touching millions of lives directly or indirectly in mentoring, inspiring and most importantly making Polymer & allied industries better.



Specialized Consulting Services



Regulatory Compliance & Legal Obligations

- › Standard & Guidelines related to Design, Manufacturing, Use & Disposal of Plastics Products
- › Govt. Policy Advocacy & Implementation
- › Food Contact: Environmental Standards
- › Extended Producer Responsibility (EPR): Registration & Audit



Recycling & Sustainability

- › 3R, Circular Economy & Carbon Neutralizing
- › Recycling Content Requirements
- › End of Life Management (BOL, EOL, LCA & P.W.M. Rules)
- › Enforcement of SUP ban & Restrictions
- › Labeling & Marking (QR Code)



Advanced Material Development

- › Material Innovation and Formulation Optimization
- › Industry Specific Applications: Packaging, Automotive, Aerospace, Medical Devices etc.



Technical & Financial Feasibility

- › Plant Setup, Material & Machinery Selection: Financial viability
- › Laboratory/Institute Set up & Management
- › Technology Adoption & Implementation: AI & Machine Learning



Areas of Expertise & Consultancy

Plastics and Environment

- ✓ Plastic Pollution and Littering
- ✓ Compostable/Biodegradable pkg.
- ✓ Physical, Mechanical, Chemical & Organic Recycling
- ✓ E-waste/Plastics Waste Mgt
- ✓ Solid Waste Mgt: TAD/MAD
- ✓ Micro & Nano Plastics

Product Design & 3D Printing

- ✓ Import of Products Substitute: Fossil & Non Fossil Products
- ✓ Tailored Material Architectures
- ✓ SLA, FDM & SLS (Prototyping)
- ✓ Multifunctional Material System
- ✓ Rheology Driven Printability
- ✓ Design for Additives Material



Selection of Plastics Materials

- ✓ Advance Filled Plastics: Additives & Masterbatch
- ✓ Composites and nanocomposites
- ✓ Dispersants and Coupling Agents
- ✓ Impact Modification of Plastics

Polymer Mfg. Process & Engineering

- ✓ Meltflow and Viscosity Control
- ✓ Process Optimization & Troubleshooting
- ✓ Advanced Blending & Compounding
- ✓ Mathematical Modeling & Simulation
- ✓ Innovating Molding & Extrusion

Analysis of Polymers and Plastics

- ✓ Mechanical and Chemical Testing
- ✓ Thermal and Rheological Testing
- ✓ Product Testing
- ✓ Failure Analysis/Investigation
- ✓ Automotive Polymers Testing
- ✓ Composite Testing
- ✓ Microbial Testing
- ✓ NDT (Non Destructive Testing)



Management System, Audit, Training, Certification Services

ISO 9001	ISO 50001
ISO 14001	ISO 21001
ISO 45001	ISO 27017
ISO 13485	ISO 27018
ISO 22000	ISO 41001
ISO/IEC 27001	ISO 31000
ISO 20000-1	FSSC 22000
ISO 27701	IATF 16949
ISO 42001	ISO 10002
ISO/IEC 22301	ISO 22716
ISO 37001	ISO 30000
ISO 55001	ISO 15378

PRODUCT CERTIFICATION

CE Marking
RoHS
FCC
ATEX
BIS/CRS/ISI
WPC/ETA

OTHER CERTIFICATION

SEDEX
GMP / GMP+
KOSHER
FSC
HACCP
C-TPAT
CGMP
FDA/USFDA
BIFMA
GLP
BRCGS
SA 8000
Organic
DP/GHP/GSP/GEP

Academic Accreditation, Certification & Implementation: Transforming Higher Education

✓ NAAC	✓ AICTE	✓ IQAC	✓ ACBSP	✓ ACSC
✓ NBA	✓ NIRF	✓ EQAC	✓ ASHE	✓ NEP-2020

NB - For All National & International Standards: Documentation, Audits, Inspection, Training & Development

Achievements & Industry Impact

Career Highlights

- ✓ **Former Director General (2007-2021), CIPET** (Central Institute of Petrochemical Engineering & Technology, Govt. of India)
- ✓ **Adjunct Professor: Top International Universities**
- ✓ **Former Chairman:** Bureau of Indian Standards (BIS), PCD-12, PCD-27, CED-50 (Plastics)
- ✓ **Keynote Speaker:** International Conferences.



Testimonial (Selective)

“ Dr. Nayak is a Jewel in the crown for the plastic industry in India. The industry has immensely benefited by his knowledge & guidance. His expertise in recycling of plastic has helped the industry to adopt Plastic waste management, Recycling, Biodegradable plastic and many more. Words are not enough to describe this internationally recognised, down to earth, noble & humble personality.”



Sri. Raju D Desai
Former President
All India Plastics
Manufacturers Association (AIPMA)

“ Dr. Nayak is a true visionary, he is very passionate for driving research with a strategic focus to address emerging societal needs that are most relevant, assembling the most comprehensive team of researchers to resolve various technical solutions to real life problems in Polymer Science & Technology.”



Dr. Ranganath Shastri
Director General
Expert Plastic Solutions
De Mexico
Mexico

“ A technocrat and a visionary, his understanding of polymers is surpassed only by a ceaseless desire to propagate a deep body of knowledge that he has built up through incessant exposure to and expertise in plastics. A common observation within the plastic fraternity is that Dr. Nayak has seen, analysed, understood and catalogued technologies years ago that people have only just now started talking about.”



Sri. Alok Tibrewala
President, Indian Plastic
Federation (IPF)



Lifetime Achievement Award For Distinguished Contribution to Indian Plastics Industries

37+ Years of Experience	15+ Honors & Awards	30+ Books with International Publishers	55+ Ph.D scholars Mentored
75+ M.Tech (Thesis) Supervised	650+ Research papers in International Journal	700+ International Conferences	50+ Patents & Designs
100+ Funded Projects	750+ Technical Consultancies	Google Scholar	As on 2026
<i>Top 2% of the Global Scientists in the field of Polymers as per the study by Stanford University, USA.</i>		Citations	28361
		h-index	79
		i10-index	422

Technology Service Rendered (Selective only)



Partner with a Polymer Visionary!



MoU with UBA, Argentina: Signed by Prof.(Dr.) S. K. Nayak,
& Prof. Ing. Horacio Salgado, Decano, Facultad de Ingenieria, UBA

Talk to Us

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**Pioneering the future of
Petrochemicals and Sustainable Polymers**

Delhi ✦ Chandigarh ✦ Chennai ✦ Bhubaneswar ✦ Cochin ✦ Kolkata