



Curriculum Vitae

Name: Dr J N PANDEY;

Date of Birth: 23rd November 1961(Age: 61 Years-Superannuated on 30th November 2021 from Indian Oil Corporation Limited-R&D Centre Faridabad)

Position: General Manager (Lubricant Technology, Indian Oil Research & Development Centre, Faridabad, Haryana)

Qualification: PhD in Synthetic Chemistry in Organo-metalic Chemistry from Rajasthan University, Jaipur. 1986. Msc. in Organic Chemistry from Agra University Agra in 1980.

Experience: More than 35 years rich experience as Research Scientist/Technical Expert in the area of Petroleum/Lubricants/Petrochemicals at Indian Oil Research &Development Centre Faridabad and providing technical services/Training to Indian Industry.

- 2 Years teaching experience as Assistant Professor of Industrial Chemistry at NIT, Jaipur. 1986-1988.
- Joined Indian Oil R&D Centre (IBP), Manesar, Gurgaon as Research Officer in July 1988 and transferred to Indian Oil R&D Centre, Faridabad in April 2008 and superannuated as General Manager-Lubricant Technology . Head of Department of Industrial Synthetic

Lubricants (2012- 2021), Metal Working Oils (MWO & Specialty Product Department (2008-2012).for product developments.

Before superannuation from Indian Oil R&D Centre on 30.11.2021 I was looked after Synthetic Lubricant Department as General Manager (R&D) with the main focus to develop import substitution for synthetic lubricants, Heat Transfer Fluids and process fluids currently imported and used in India mainly-Refineries, Petrochemical plants, Oil Exploration & transportation, Railways, Defense, Steel Plants, Coal Mining, Cement Plants, Thermal Power Plants, Food Process Industries.

Product Development of Major Lubricants Areas.

➤ Lubricants: MWO & Specialty Products.

Automotive antifreeze coolants, Automotive brake fluids, Neat and soluble metal cutting oils, Rust preventive oils, Steel rolling oils, Broaching Oils, Steel molding oils, Forging oils, Emulsion based fluids like Fire Resistant hydraulic Fluids (Invert Emulsion and Water Glycol based) for underground coal mines. Rubber process oils, Printing ink process oils.

➤ Industrial Synthetic Lubricants.

Air, Hydrocarbon gas and ammonia compressor oils, Eco friendly Refrigeration oils, polymeric quenching fluids, Fire resistant hydraulic fluids (HFB, HFC, HFDU, HFDR types), phosphate ester based turbine governor fluids, Gear oils, biodegradable long life industrial lubricants. Food Grade NSF approved lubricants, Barrier fluids, coning oil for polyester yarn Industry. Synthetic heat transfer fluids which can be used from -100 to 400C temperature applications used in hot oil systems of petrochemical and other industrial process industries currently

monopoly items of Solutia and DOW Chemical's globally. Successfully replaced five synthetic imported HTF used by Indian Oil Refineries by developed Servo Hot Oils. Gear oils for Electric locomotive Railways Engines (WAP 5) used in high speed passenger trains. Synthetic lubricants for import substitution used by Defence, Railways, Navy, Coast Guards including INS Vikramiditya of Indian Navy.

- Technical services related to commercialization of industrial lubricants to customers and Indian Oil Lube Marketing Division.
- Oil condition monitoring and field trials of synthetic lubricants at customer sites.
- Alternate vendor developments for additives and base oil suppliers used in lubricants for developing cost effective lubricant formulations.
- OEM Approvals for industrial lubricants like Siemens, Germany, BHEL Haridwar, RDSO Lucknow, Flender, EATON of industrial high performance lubricants.
- Arranging testing from global and Indian laboratories for which we don't have testing facilities like IIP Dehradun, Sriram Test House Delhi, Intertek USA etc
- Arranging /participation of coordination meeting of Lube marketing technical service department, lube input purchase department and lube blending plants to provide directions for quality lube product manufacturing at competitive price.
- Resolve day to day technical problems of lubricant actual users for smooth operations of plants and machineries.
- To provide regular technical presentations for Lube marketing, users, refineries and big customers like Railways, Steel Plants, Coal mines, Cement Industries for lube awareness program/workshops

- **Publications**: Numerous in the form of patents, papers in journals, Technical updates, PDS, MSDS also delivered talks in Conferences, Seminars and workshops.

- I am also certified **NABL & FDAS Lead /Technical Assessor for conducting quality audits as per ISO:17025** for Chemical testing laboratories (QC laboratories) in the area of petroleum, lubricants and explosives and conducted audit of more than 100 laboratories of major oil refineries, oil marketing and lube blending plants in Indian in last 20 years(Indian Oil, BPCL, HPCL, Reliance etc).

❖ **Remark**: I have rich 35 years experience of Petroleum and Lubricants related to R&D activities. Superannuated from Indian Oil on 30.11.2021 and available to take new assignment. I can offer my services as advisor/consultant in the area of high performance industrial lubricants where mineral oil based lubricants and process fluids not found suitable and where I can contribute my Industrial experience and knowledge to industry.

Email: drjnpandey@gmail.com

Mobile: 9999347479

Residence: House No. 1245, Laxman Vihar, Phase-2,

Gurgaon(Haryana), PIN 122001/ Flat No 307, Tower No 2, Klassic Heights, Jaypee Green Wish Town, Sector 129 Noida 201304(UP)

Focused High Performance synthetic Lubricants & Process Fluids.

- 1. Polymeric Quenching Fluid. PAG based water soluble quenching . Trend is replacement of mineral oil based quenching fluid with water soluble PAG based quenching fluids. Imported or Hardcastle .approx market potential 3000 KLPA. Price Rs200-300/Lit. Need Indian manufacturer of suitable PAG currently imported.**
- 2. Fire Resistant Hydraulic Fluids.A- HFB-Invert emulsion type for underground coal mines(1000KL/Rs60/L.B-HFC-Water Glycol based for steel industry and Indian Navy Marine ships Vassels(250KL/Rs.300/L).HFDU-Polyol ester and PAG based for steel plants(1000KL/Rs250/L. Phosphate ester based HFDR type for power plants, nuclear plants and steel furnaces(1000KL/Rs1000-2500/L.**
- 3. Longlife energy efficient air and HC gas Compressor Oils-PAO-ester based, PAG/Polyol ester & PAG based. 1000KL/Rs500-4000/L**
- 4. Energy Efficient synthetic compressor oil for ammonia refrigeration – New area good market potential new approach adopted by global Lube suppliers(1000KL/Rs1500/L**
- 5. Wind Turbine Synthetic Gear Oil. PAO-Ester based for wind mills. Tough to get approval monopoly of MNC Mobil Shell . 1000KL/Rs1000-1200/L**
- 6. Synthetic Refrigeration oil POE 22 and 32 grade Emerson, Tecomseh, Hitachi etc 1500KL projection mentioned by OEM Rs.500/L**
- 7. Synthetic Heat Transfer Fluids equivalent to Therminol VP-1,Therminol 55 and Therminol 66 used in petrochemical plants and chemical, food processing units as thermic fluids temp range -100 to 400C different HTF for different application including solar CSP power plants. Base fluids imported 25000KL/Rs. 200 to 1000/L**