Resume: DR. Sarita Garg

Name : Dr. Sarita Garg

Date of Birth : 14th January 1961

Address : House No.20, Sector-7A, Faridabad-121006

Telephone : 9654936867

Email : gargsaritadr@gmail.com

#### **Educational Qualifications**

Sept 1989 Some Studies on the Modification of Starch for sizing

Department of Textile Technology,

INDIAN INSTITUTE OF TECHNOLOGY, DELHI

Jul. 1980 to M.Sc.; Organic Chemistry

May 1982 KURUKSHETRA UNIVERSITY, Kurukshetra, India

Jul. 1976 to **B.Sc.**; (Chemistry & Botany, Zoology)

May 1980 M.D. University, Rohtak, India

#### **WORK EXPERIENCE**

Oct. 1991 to Indian Oil Corporation, Research & Development Centre,

**Faridabad** 

Jan 2021 Superannuated as Chief General Manager (Lubricant Technology)

Responsible for Development of Automotive, Industrial, metal

Working and Synthetic & Specialty Lubricants

 Initially, joined Synthetic Lubricants group of R&D Centre, since inception of this group and was responsible for the development and performance validation of full range of Synthetic and specialty Lubricants of Servo Products. Major products include Servosyngear series, Servosyngear RR for Indian Railways, Energy efficient compressor oils Servo Synco E series, Turbine Governor fluid for power plants, heat Transfer Fluids, Fire resistant Hydraulic Fluids for high temperature applications and Aviation Lubricants.

Aviation Lubricants.

Introduced a new range of Food grade Lubricants based on then
prevailing International trends, making IndianOil the first Public
Sector company registered with international approving authority
NSF, USA (National Sanitation Foundation) for special grade
lubricants for Food Processing Industry.

 Assigned responsibility of Automotive Oils Division in 2012 and since then worked closely with National & International OEMs such as Maruti Suzuki India Ltd, Mahindra & Mahindra, TATA Motors, VECV, Ashok Leyland, Nissan India & Japan, Hyundai India & Korea, Suzuki Japan etc. for fulfilling their various automotive lubricants requirements both for factory fill and service fill.

Feb. 1982 to Jun. 1989

#### INDIAN INSTITUTE OF TECHNOLOGY, Delhi, India

Senior Research Assistant, Textile Technology Department. The major responsibilities included development and evaluation of Sizing agents for Synthetic and Blended Polyester/ Cotton &

Polyester/ Viscose yarn for Low humidity weaving, a DST projects

Papers & patents: Published /presented > 50 Research papers in International Conferences & journals of International repute including SAE International, USA.

Contributed in 11 National & International Patents

#### Papers Presented/Published: PhD Thesis

- 1. "Some Studies on Modification of Starch for Low Humidity Applications" P.K.Hari and S.Bhalla, Starch/Starke, 38 (1986) Nr.9, S 301-305
- 2. "Moisture Accessibility of Hydrophilic Sites in Starch and Modified Starch" P.K.Hari, A.K.Agarwala and S.Garg, Starch/Starke, 40 (1988) Nr.6, S 221-223
- 3. "Gelatinization of Starch and Modified Starch" P.K.Hari ,S.Garg and S.K.Garg, Starch/Starke, 41 (1989) Nr.3, S 88-91
- 4. "Evaluation of properties of Starch and Modified Starch for Sizing and Desizing" P.K.Hari and Sarita Garg, Starch/Starke, 41 (1989) Nr.3, S 101-105
- 5. **"Size Recipes for Low Humidity Weaving**" paper Presented in 7<sup>th</sup> International Symposium on Sizing, West Germany, Sept 1989
- 6. "Size Recipes for Low Humidity Weaving of Cotton Yarns" paper Presented in 27th Joint Technological Conference, IIT Delhi

#### Publications/ Presentations after joining IOC:

- 7. **Sarita Garg**, V.K.Chhatwal & S.P.Srivastava, "Synthetic Lubricants Scenario & Growth in Asia Pacific Region", 1st International Symposium on Fuels & Lubricants, Dec 8-10, 1997, N.Delhi, India
- 8. S.K.Srivastava, A.V.Aggarwal, V.K.Chhatwal, **Sarita Garg**, V.P.Deshmukh,

- "Development of Antistatic Spin Finish Oils for synthetic Fiber processing ",
- 39th Joint Technological Conference, March 21-22, 1998, IIT Delhi, India
- 9. **Sarita Garg**, Deepak Saxena, R.T.Mookken, A.K.Misra & S.P.Srivastava, "Development of an Indigenous Corrosion Preventive cum Preservative oil for Aircraft Engine ", National Conference on Quality Engineering in Aerospace Technologies QUEST 99, August 20-21, 1999, Bangalore, India
- 10. S.B.Kumhar, Sarita Garg, R.T.Mookken, A.K.Misra, S.P.Srivastava & A.K.Bhatnagar, "Development of Synthetic Industrial Gear oil for High Temperature Applications" 2<sup>nd</sup> Lubricating Grease Conference, January 28-29, 2000, Goa India
- 11. **Sarita Garg**, R.T.Mookken, M.P.Singh, N.Ali, A.K.Misra, S.P.Srivastava & A.K.Bhatnagar, "Environmental Friendly Lubricants: Indian Efforts" 2<sup>nd</sup>, International Symposium on Fuels & Lubricants, March 10-11, 2000, N.Delhi, India
- 12. S.B.Kumhar, **Sarita Garg**, R.T.Mookken, A.K.Misra, S.P.Srivastava & A.K.Bhatnagar, "Synthetic Industrial Lubricants: An Essentiality of Future" Petrotech 2001, January 9-12 2001, Delhi, India
- 13. S.B.Kumhar, **Sarita Garg**, R.T.Mookken, A.K.Misra, S.P.Srivastava & A.K.Bhatnagar, "Significance of Gear System Metal Compatibilty: A Case Study with a Novel Synthetic Gear Oil" 3<sup>rd</sup> National Lubricating Grease Conference, Jodhpur, Feb 2001
- 14. **Sarita Garg**, A.K.Jaiswal, R.T.Mookken, A.K.Misra, N.R.Raje & A.K.Bhatnagar,"Proliferations in quality of Industrial Gear Oils: Significance Vs Cost Effectiveness" 4th National Lubricating Grease Conference, Jan 16-18, 2002, Bangalore
- 15. **Sarita Garg**, S.B.Kumhar, R.T.Mookken, V.K.Chhatwal, A.K.Misra, N.R.Raje, A.K.Bhatnagar, "Superiority of Synthetic Heat Transfer Fluids, A Case Study", 3rd, International Symposium on Fuels & Lubricants, Oct 7-9, 2002, N. Delhi, India
- 16. R.T.Mookken, A.K.Jaiswal, **Sarita Garg**, K.P.Naithani, A.K.Mehta, N.R.Raje & A.K.Bhatnagar, "Importance of Base oils in Industrial Lubricants: Shift from Conventional Base Oils to Synthetic," Petrotech 2003, Jan 9-12, 2003 Delhi.
- 17. V.P.Deshmukh, R.T.Mookken, **Sarita Garg**, Piyush Dubey, Mukesh Mittal & N.R.Raje, "Field Evaluation of Aluminium Trimming Oil," Petrotech 2003, Jan 9-12, 2003 Delhi.
- 18. **Sarita Garg**, R.T.Mookken, K.P.Naithani, A.K.Mehta & N.R.Raje, "Use of Non-Conventional base stocks-A trend towards Resolving the Severities in the Lubrication of Modern Machines," 5th National Lubricating Grease Conference, Jan 16-18, 2003, Agra

- 19. **Sarita Garg**, K.P.Naithani "Application of Castor oil and its Derivatives in Lubricant industry," Presented in seminar of Solvent Extractor's Association of India, 23<sup>rd</sup> May, 2003. Ahmedabad
- 20. R.T. Mookken, **Sarita Garg**, K.P.Naithani "High performance lubricants for textile industry," Presented in NLGI 2005, Kochin
- 21. **Sarita Garg**, S.B.Kumhar, R.T.Mookken, T.L.Nanda, "High performance Synthetic gear oil for pinion & Bull gears", 4th International Symposium on Fuels & Lubricants, Oct 27-29, 2004, N. Delhi, India
- 22. **Sarita Garg**, Kavita Rai, R.T.Mookken, , " Synthetic Lubricant for Hydrocarbon gas compressors" , Petrotech 2005, N. Delhi, India
- 23. S.B.Kumhar, Kavita Rai, **Sarita Garg**, R.T.Mookken, K.P.Naithani, R.K.Malhotra & R.P.Verma" Cost effective solution to Flare gas recovery: A case study with compressor lubricants", ISFL 2006, N. Delhi, India
- 24. G.S.Kapur, **A.S.Sarpal, Sarita Garg**, & R.T.Mookken, , "A protocol for Unambigous Identification of components in Synthetic Ester based lubricants using Modern NMR Experiments", ISFL 2006, N. Delhi, India
- 25. A.N.Jha, T.L.Nanda, **Sarita Garg**, "Evolution of Eco Friendly refrigeration oil compatible with R 134a", ISFL 2006, N. Delhi, India
- 26. S.B.Kumhar, Kavita Rai, **Sarita Garg**, R.T.Mookken, K.P.Naithani & R.K.Malhotra, "High performance synthetic Fire Resistant Hydraulic Fluid- An ideal choice for Fire Hazardous Environments, Accepted for ISFL 2008.
- 27. Kavita Rai, S.B.Kumhar, , **Sarita Garg**, R.T.Mookken, K.P.Naithani & R.K.Malhotra, "Oxidative and Thermally stable chain lubricant" Petrotech 2009, N. Delhi, India
- 28. **Sarita Garg**, S.B.Kumhar, R.T.Mookken, K.P.Naithani & R.K.Malhotra, "High performance synthetic base stocks-Cost effective Lubrication Solutions" ISFL 2010, N. Delhi, India
- 29. Kavita Rai, S.B.Kumhar, Sarita Garg, E. Sayanna, R.T.Mookken and R K Malhotra "Environment Friendly Synthetic Fire Resistant Hydraulic Fluid (FRHF): Suitability for Fire Prone Hydraulic Systems in Steel Plants, ISFL 2012, N.Delhi, India
- 30. Import substitution of Kobelco Screw Compressor oil in Indianoil Petronas Itd., Haldia a case study, ISFL 2012, N.Delhi, India Monojit Chatterjee, Sr. Manager (Instl. Lube Sales), IOC(M) Haldia.
  - Tapas Gupta, DGM(Ops), IndianOil Petronas Ltd., Haldia

**Dr. SARITA GARG**, Sr. Research Manager & Dr. KAVITA RAI, Dy. Manager (Research), Dr.E.SAYANNA, DGM(Gr&IL), Indian Oil Corpn. Ltd (R&D) Centre, Faridabad

### 31. Performance of Low Viscosity multi-grade Engine oils in 4-Stroke Engine Powered Motor Cycle

Mrinmoy Kalita, V.K.Bhatla, Bhuvenesh Tyagi, M.Sithananthan, M. Subramanian, Sarita Garg, SSV Ramakumar, A.K.Sehgal, R.Suresh, "ISFL 2016, New Delhi

#### 32. Development of an Universal Tractor Transmission Oil (UTTO) with superior anti-chatter and long drain capabilities

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### 33. Low Viscosity Passenger Car Diesel Engine Oil: Balancing Fuel Efficiency and Durability Aspects

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Virginioa Carrick, The Lubrizol Corporation, T.L. Sethuram, Lubrizol India Pvt. Limited

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### 38. Studies on Friction and Wear properties of Low Viscosity Passenger Car Diesel Engine oil

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#### 40. Future fuel economy and Emission Compliant Lubricants for Indian Passenger Car market

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#### 41. Automotive Transmission Efficiencies V/s NVH characteristics- Ar experimental study

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#### 42. Developing Energy Efficient Manual Transmission Fluids (MTFs)

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#### 43. Study on Fuel Efficiency and Durability Aspect of a Low Viscosity Heavy Duty Diesel Engine Oil (SAE 2020-01-2164)

Snigdhamayee Praharaj, Sandeep Kumar, Sarita Seth, M Subramanian, Sarita Garg, Deepak Saxena, SSV Ramakumar, Indian Oil Corporation Ltd.

SAE International, SAE Technical paper 2020-01-2164

### 44. Development of screening test methodology to study NVH performance of EV Transmission oil using FZG Gear Test rig

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#### 45. Long Life compressor Oil: from Lab evaluation to field validation

Chanakya Tripathi, L.M.Pandey, MNK Bolisetty, Kavita Rai, Pankaj Bhatnagar, Sarita Garg, Deepak Saxena, SSV Ramakumar, ISFL 2021, SAE No. 21-ISFL-0057

### 46. Field Performance Validation of Synthetic Flushing Fluid for Hot Oil System Cleaning

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# 47. Assessing Efficiency Benefits of Low Viscosity Gasoline Engine Oils Sarita Seth, Swami Maloth, Puneet Singh, Prashant Kumar, ,A.S.Ramadhas, R.Mahapatra, Pankaj Bhatnagar, Sarita Garg, Deepak Saxena, SSV Ramakumar, ISFL 2021, SAE No. 21-ISFL-0060

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#### 50. Field Performance of a New Generation Gas Engine Oil Lubricant for Extended Oil Drain Potential

Bijan Roy, Yogesh Kumar Sharma, Sarita Seth, Pankaj Bhatnagar, Sarita Garg, Deepak Saxena and SSV Ramakumar, ISFL 2021,

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