## Dr. N. L. Parthasarathi

## Indira Gandhi Centre for Atomic Research | IGCAR

#### **Scientific Officer**

Metal Forming and Tribology Section,

Materials Development and Technology Division,

Materials Engineering Group,

Metallurgy and Materials Group in Indira Gandhi Centre for Atomic Research,

Kalpakkam, Tamil Nadu, India.

#### **Skills and Expertise**

Microstructure, Mechanical Properties, Metalls, Metallurgical Engineering, Material Characterization, Mechanical Testing, Materials Processing, Material Characteristics, Materials Testing, SEM Analysis.

# **Research Experience**

• May 2010 - present

# Indira Gandhi Centre for Atomic Research

Department of Atomic Energy

Chennai, India

#### **Position**

Scientific Officer

### **Description**

Working in Metal forming and Tribology Section. Sheet metal forming and tribological characterization of Engineering materials.

• July 2006 - May 2010

# National Institute of Technology Tiruchirappalli

Department of Production Engineering

Tiruchirappalli, India

#### **Position**

Prinicipal Investigator

## **Description**

Principal investigator of the DST SERC funded fast track project SR/FTP/ETA-50/2007 entitled "Comparison of the hole expansion ratio, stretch flange ability and crash worthiness of high strength steel tailor welded blanks by various welding techniques". Simultaneously carried out PhD in High temperature tribological studies of 316 L Austenitic stainless steels.

• January 2005 - June 2006

## National Institute of Technology Tiruchirappalli

Department of Production Engineering

Tiruchirappalli, India

#### Position

Project Associate

## **Description**

TATA Steel Project on Formability

• June 2002 - December 2004

# Mookambikagai college of Engineering

Production Engineering Department

Pudukkottai. India

#### **Position**

Lecturer

#### **Description**

Handled Fluid power Automation, Hydraulics and Pneumatics, Quality Control and Reliability Engineering, Design of Machine Elements, Design of Jigs and Fixtures and Total quality Management.

#### **PUBLICATION DETAILS**

- **NL Parthasarathi**, U Borah, MA Davinci, SK Albert, Effect of temperature in axial compression testing of Polytetrafluoroethylene employed in lamp holders of prototype fast breeder periscopeMaterials Today: Proceedings, 2020.
- K Adityan, **NL Parthasarathi**, PA Varthanan, R Priya, U Borah, Reciprocating Wear Studies of Inconel 718 and Mod. 9Cr–1Mo Ferritic Steel by Surface Profilometric CharacterizationProceedings of ICDMC 2019, 287-301, 2020.
- N Aruldev, NL Parthasarathi, B Rajasekaran, U Borah, High-Temperature Sliding Wear Characterization Studies of AISI 316 L (N) by Surface ProfilometryProceedings of ICDMC 2019, 303-320, 2020
- N Tripathi, **NL Parthasarathi**, M Eswaramoorthy, U Borah, Tribological properties of carbon reinforced and silica reinforced FKM against AISI 304 L, Materials Today: Proceedings, 2020
- A Bose, **NL Parthasarathi**, U Borah, AK Jeevanantham, Simulation Of Uniaxial Compression Of A Cylindrical Billet At Elevated Temperatures Using FEA Indian Journal of Scientific Research, 266-271, 2018
- NL Parthasarathi, MA Davinci, U Borah, R Thirumurugesan, Sliding wear studies of plasma nitrided AISI 316L (N) by Scanning Electron Microscope, Proceedings of the international conference on electron microscopy,2017
- NL Parthasarathi, U Borah, SK Albert, AK Bhaduri, Sliding Wear Studies Of Pump Liner Material (Gci 26) By Pod Tribometer, Journal of Manufacturing Engineering 11 (3), 157-160, 2016
- NL Parthasarathi, U Borah, SK Albert, Influence of Interfacial Oxides Formed During Dry Sliding Wear of NiCrBSiCFe Plasma Coating on AISI 316 Steel Substrates, High Temperature Materials and Processes 33 (1), 27-39,2014

- MA Davinci, **NL Parthasarathi**, U Borah, SK Albert, Effect of the tracing speed and span on roughness parameters determined by stylus type equipment, Measurement 48, 368-377, 2014
- NL Parthasarathi, U Borah, SK Albert, Correlation between coefficient of friction and surface roughness in dry sliding wear of AISI 316L (N) stainless steel at elevated temperatures, Computer Modelling and New Technologies 17 (1), 51-63, 2013
- NL Parthasarathi, U Borah, SK Albert, Effect of temperature on sliding wear of AISI 316 L (N) stainless steel—Analysis of measured wear and surface roughness of wear tracks,

Materials & Design 51, 676-682, 2013

• NL Parthasarathi, M Duraiselvam, U Borah, Effect of plasma spraying parameter on wear resistance of NiCrBSiCFe plasma coatings on austenitic stainless steel at elevated temperatures at various loads, Materials & Design (1980-2015) 36, 141-151, 2012