Bio-sketch of Dr. L. Rama Krishna, Scientist-'F', ARCI

Dr. L. Rama Krishna is working as Scientist 'F', Centre for Engineered Coatings, International Advanced Research Centre (ARCI), Ministry of Science & Technology, Govt. of India, located at Balapur, Hyderabad. Obtained B.Tech, from NIT-Warangal (formerly known as REC-Warangal), M.Tech from IIT-Kanpur, and Ph.D. from JNTU, Hyderabad. All the academic degrees are from Materials & Metallurgical Engineering discipline.

His professional expertise includes Conceptualization of novel and industrially relevant technologies, Design and Development lab scale and industry scale technological systems, Application Development & Technology Transfer. In addition, evaluation of Mechanical, Tribological and Corrosion behaviour of diverse thick coatings and thin films also had been his immense interest.

Dr. L. Rama Krishna's outstanding scientific contribution led to receive numerous National and International awards & recognitions such as:

- ✓ **DISTINGUISHED ALUMNI PROFESSIONAL ACHIEVEMENT AWARD**, National Institute of Technology, Warangal, 2016.
- ✓ **CERTIFICIATE OF OUTSTANDING CONTRIBUTION IN REVIEWING,** Materials and Design, Elsevier, Amsterdam, The Netherlands, 2015

- ✓ **EXECUTIVE COUNCIL MEMBER**, Materials Research Society of India, Hyderabad Chapter, 2014 onwards.

- ✓ **CONVENOR,** Thermal Spray Coating Technologies (TSCOAT-2015), organized in association with Materials Research Society of India, 23 Sept. 2015.

- ✓ **EXECUTIVE ORGANIZING COMMITTEE MEMBER**: Asian Thermal Spray Conference (ATSC) - 5 day international conference organized at Hotel Novotel, Hyderabad, Nov. 2014.

- ✓ Invited participant in Indo-US flagship "**FRONTIERS OF ENGINEERS SYMPOSIUM**", Washington DC, U.S.A., 2012.

- ✓ **CONVENOR**: INAE Annual Convention; coordinated with DMRL, RCI, DRDO and CSIR, INAE-New Delhi, December 2011.

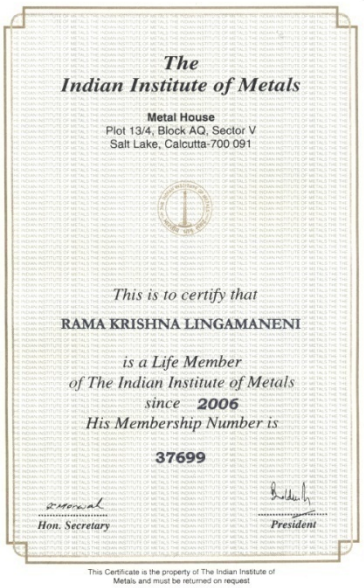
- ✓ **ORGANIZING COMMITTEE MEMBER:** two day workshop conducted with McGill University, Canada and Boeing, USA to utilize ARCI technologies to space applications, 2011.

- ✓ **CONVENOR**: Surface Engineering: Technologies, Research and Applications (SETRA) – a 5 day course (27-31 August 2012), organized at ARCI. Transferred about Rs. 7.0 lakhs surplus funds to Prof. T.R. Ananthraman Education & Research Foundation for supporting the meritorious students pursuing materials science & metallurgical engineering career.

- ✓ **SILVER MEDAL,** International Conference on Metallurgical Coatings and Thin Films (ICMCTF), San Diego, USA, 2009.

- ✓ **RESEARCH FACULTY** – Materials Science & Engineering, Northwestern University, Illinois (Chicago), USA, 2008 - 2009.

- ✓ **INTERNATIONAL SCIENTIST OF THE YEAR 2008**, International Biographic Centre, Cambridge UK
- ✓ **BOYSCAST FELLOW** – Department of Science & Technology, Government of India, 2007, Award carries US$ 30,000 fellowship grant.
- ✓ Biographic Details were published in "**WHO IS WHO IN ASIA**" in 2007, "**WHO IS WHO IN THE WORLD**" in 2008, Marquis Publication Board, Pennsylvania, USA.



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- ✓ **LIFE MEMBER**, Indian Institute of Metals, Calcutta, 2005
- ✓ **EXECUTIVE COUNCIL MEMBER**, Hyderabad Chapter of Indian Institute of Metals, Calcutta, 2005-2007
- ✓ **YOUNG ENGINEER AWARD**, Indian National Academy of Engineering (INAE), 2005 (US$ 2,700 cash prize, citation and a gold medal).
- ✓ **THOMSON'S HIGHLY CITED AWARD,** Thomson's Web of Science, Singapore, 2005.

- ✓ **ORGANIZING COUNCIL MEMBER**, International Conference on Advanced Surface Treatments: Research and Applications (ASTRA), Hyd, 3-6 Nov. 2003.
- ✓ **BEST PAPER AWARD**, 1st Prize, NMD-ATM, Indian Institute of Metals, Bhilai, 2000.
- ✓ "**BEST THESIS AWARD**" – M.Tech thesis nominated for 1999, IIT-K.
- ✓ **BEST ACADEMIC PERFORMANCE AWARD,** REC-Warangal, 1997

LIST OF PATENTS:

- ✓ **L. Rama Krishna**, D. Srinivasa Rao, S.V. Joshi and G. Sundararjan, Process and apparatus for protection of Structural Members From Wear, Corrosion and Fatigue Damage – *Indian Patent Appln # 1839/DEL/2015*, *June 2015.*

- ✓ **L. Rama Krishna**, A.V. Rybalco, G. Sundararajan, Micro Arc Oxidation Process for forming ceramic coatings on metallic bodies and an apparatus for carrying out the process, *US Patent No: 6,893,551*, *Indian Patent No: 209817.*

- ✓ **L. Rama Krishna**, Nitin P. Wasekar, G. Sundararajan, "A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process" Indian Patent No: 1828/DEL/2008/01082008, UK Patent No: GB 2464378, US Patent No: US 8,486,237, Japan Patent No: 5442386, German Patent No: 10 2009 044 256, and French Patent Application No: 0957102 to cater the commercialization opportunities.

- ✓ **L. Rama Krishna**, Nitin P. Wasekar, G. Sundararajan, "A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process", US Patent No: 9,365,945

INVITED BOOK CHAPTERS:

- ✓ **L. Rama Krishna** and G. Sundararajan, Wear and Corrosion Protection of Aluminum and Its Alloys Through Micro Arc Oxidation Coatings, in "*Encyclopedia of Aluminum and Its Alloys*", Ed: George E. Totten, Olaf

Kessler, Murat Tiryakioglu, Pubs: Taylor & Francis, 2016, ISBN-13:978-1466510807, ISBN-10: 1466510803. (In press).

- ✓ P. Suresh Babu, **L. Rama Krishna** and D. Srinivasa Rao, Thermal Spray Coatings for Protecting Al alloys, in "*Encyclopedia of Aluminum and Its Alloys*", Ed: George E. Totten, Olaf Kessler, Murat Tiryakioglu, Pubs: Taylor & Francis, 2016, ISBN-13:978-1466510807, ISBN-10: 1466510803. (In press)

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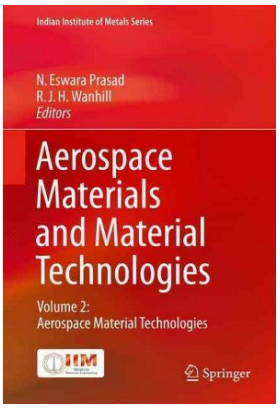
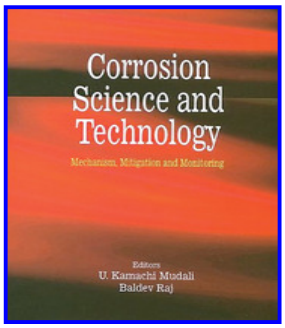
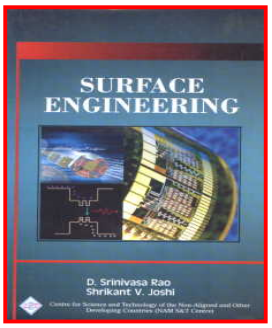


- ✓ G. Sundararajan, **L. Rama Krishna**, N.P. Wasekar, G. Sivakumar and A. Jyothirmayi, *Coatings for Corrosion Resistance* in "*Corrosion Science and Technology: Mechanisms, Mitigation and Monitoring"*, Pubs: Taylor & Francis, UK, Nov/Dec 2008 pp: *243-283, ISBN-13:978-0849333743, ISBN-10:0849333741*.



- ✓ **L. Rama Krishna,** *Micro Arc Oxidation Vs Hard Anodizing: Process Features and Coating Properties* in "Surface Engineering", Ed: D. Srinivasa Rao and Shrikant V. Joshi, Pubs: NAM S&T Centre, Daya Publishing House, 2010 pp: 231-265, ISBN: 9788170356288.

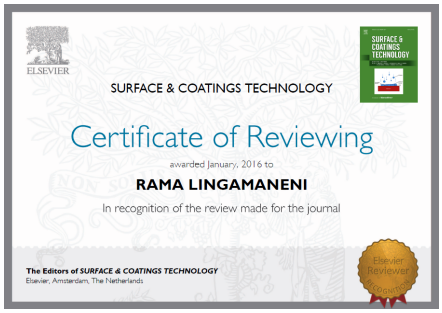


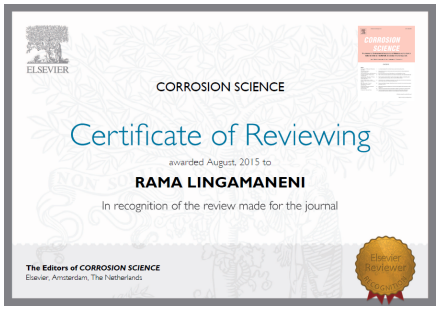
BOARD / EXPERT COMMITTEE MEMBER:

- ✓ Chairman: *Aerospace Think Tank* 2017-19.
- ✓ Member – Board of Studies: Department of Metallurgical and Materials Engineering, RGUKT, Nuzvid
- ✓ Editorial board Member: *Journal of Materials Science and Surface Engineering* - 2014 onwards
- ✓ Member, Recruitment Board and Policy Making Committees, ARCI – 2016 onwards
- ✓ Advisory Board Member, *Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Vijayawada*- 2014 onwards
- ✓ Departmental Peer Review Committee Member, *Department of Metallurgical and Materials Engineering, NIT-Warangal* - 2015
- ✓ Industry – Institute Interaction Committee Member, *Department of Metallurgical Engineering, JNTU-Hyderabad* - 2014 onwards
- ✓ DRDO Assessment Council (DAC) technical expert, *Research Centre Imarat, Hyderabad*, 2015
- ✓ JRF/SRF Screening and Interview Board Member, *International Advanced Research Centre, Hyderabad* – 2014, 2016
- ✓ M.Tech. Thesis Examiner, *Department of Mechanical Engineering & Department of Metallurgical and Materials Engineering, NIT-Warangal* – 2013 onwards

RECOGNIZED REVIEWER

- ✓ Status confirmed by several prestigious international journals such as Materials and Design, Surface & Coatings Technology, Materials Chemistry and Physics, Journal of Thermal Spray Technology, Corrosion Science, Metallurgical and Materials Transactions A, Surface Review & Letters, Applied Surface Science, Wear, Journal of Alloys and Compounds, Materials Science & Engineering A.





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- ✓ **L. Rama Krishna** and G. Sundararajan, Aqueous Corrosion Behaviour of Micro Arc Oxidation (MAO) Coated Magnesium alloys – A Critical Review, *JOM (*formerly known as: *Journal of Metals)* 66 (6) (2014) 1045-1060.

CONTRIBUTED JOURNAL ARTICLES:

- ✓ T. Arunnellaiappan, S. Arun, S. Hariprasad, S. Gowtham, **L. Rama Krishna**, N. Rameshbabu, Fabrication of Corrosion Resistant Hydrophobic Ceramic Nanocomposite Coatings on PEO Treated AA7075, *Surface and Coatings Technology,* 2017 (Under review)

- ✓ V. Rohit**, L. Rama Krishna**, A. Venu Gopal, Dynamic Force Signal Analysis in Dry Finish Turning of aluminum Metal Matrix Composites, *International Journal of Machine Tools and Manufacture* (2017) (under review)

- ✓ P.S. Babu, D.S. Rao, **L. Rama Krishna,** G. Sundararajan, Weibull analysis of hardness distribution in detonation sprayed nano-structured WC-12Co coatings*, Surface and Coatings Technology*, 319 (2017) 394-402.

- ✓ T. Arunnellaiappan, **L. Rama Krishna**, S. Anoop, R. Uma Rani, N. Rameshbabu, Fabrication of Multifunctional Black PEO Coatings on AA7075 for Spacecraft Applications, *Surface and Coatings Technology*, 307 (2016) 735-746.

- ✓ K. Valleti, S. Puneet, **L. Rama Krishna** and S.V. Joshi, Studies on cathodic arc PVD grown TiCrN Based Erosion Resistant Thin Films, *Journal of Vacuum Science and Technology A*, 34(4) 041512-1-7, 2016.

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- ✓ D. Sreekanth, N.R. Babu, K. Venkateswarlu, Ch. Subrahmanyam, **L. Rama Krishna**, K.P. Rao, Effect of K_2TiF_6 and $Na_2B_4O_7$ as electrolyte additives on pore morphology and corrosion properties of plasma electrolytic oxidation coatings on ZM21 magnesium alloy, *Surface and Coatings Technology* 222 (2013) 31-37.

- ✓ A. Venkateswarlu, V.K. Sharma, **L. Rama Krishna**, Evaluation of Microstructure and Texture of Alloy-90 Sheets, *International Journal of Latest Trends in Engineering and Technology (IJLTET)* 2(3) (2013) 1-10.

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StressCorrosion Behaviours of Plasma-Electrolytic-Oxidation-Treated AA7075 Aluminum Alloy Forging in 3.5wt.%NaCl Solution, *International Journal of Corrosion*, Volume 2012, Article ID 823967, doi:10.1155/2012/823967

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- ✓ N. P. Wasekar, N. Ravi, P.S. Babu, **L. Rama Krishna** and G. Sundararajan, High-cycle Fatigue Behavior of Microarc Oxidation Coatings Deposited on a 6061-T6 Al alloy, *Metallurgical and Materials Transactions A*, 41-1 (2010) 255-265.

- ✓ V. Krishna, **L. Rama Krishna**, N. Ravi, Novel Multilayer Nano-composite Coatings by Cylindrical Cathodic Arc Deposition for Dry, High Speed Machining Applications, *Surface Engineering Bulletin*, Vol.2, Issue 3, October 2009, pp. 3-4.

- ✓ N.P. Wasekar, A. Jyothirmayi, **L. Rama Krishna** and G. Sundararajan, Effect of Micro Arc Oxidation Coatings on Corrosion Resistance of 6061-Al alloy, *Journal of Materials Engineering and Performance* 708 (2008) 708-713.

- ✓ **L. Rama Krishna**, Micro Arc Oxidation Coating Technology: A Recent Innovation, *Surface Engineering Bulletin*, Vol.1, Issue 1, April 2008 pp. 3-4.

- ✓ B. Rajasekaran, S.G. Sundara Raman, **L. Rama Krishna**, S.V. Joshi and G. Sundararajan, Influence of Micro Arc Oxidation and Hard Anodizing on Plain Fatigue and Fretting Fatigue Behaviour of Al-Mg-Si alloy, *Surface and coatings Technology* 202 (2008) 1462-1469.

- ✓ **L. Rama Krishna**, A. Sudha Purnima, N.P. Wasekar and G. Sundararajan, "Kinetics and Properties of Micro Arc Oxidation Coatings Deposited on Commercial Al Alloys", *Metallurgical and Materials Transactions A*, 38 (2007) 370-378

- ✓ **L. Rama Krishna**, A.S. Purnima and G. Sundararajan, "A Comparative Study of Tribological Behavior of Microarc Oxidation and Hard Anodized Coatings", *Wear,* 261 (2006) 1095-1101.

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- ✓ G. Sundararajan and **L. Rama Krishna**, "Micro Arc Oxidation: A Novel Electrochemical Coating Technique", *Proceedings of the International Convention on Surface engineering (INCOSURF),* August 25-27 2004, 9-11.

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- ✓ G. Sundararajan and **L. Rama Krishna**, "Mechanisms underlying the formation of thick alumina coatings through the MAO coating technology" *Surface and Coatings Technology*, Vol.167, 2003, 269-277.

- ✓ **L. Rama Krishna**, D. Sen, D.S. Rao and G. Sundararajan, "Coatability and Characteristics of Fly Ash Deposited on Mild Steel by Detonation Spray Technique", *Journal of Thermal Spray Technology,* Vol.12 (1) 2003, 77-79.

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- ✓ G. Sivakumar, **L. Rama Krishna**, V. Jain, D.S. Rao, G. Sundararajan, and G.M. Reddy, The Influence of the Process Parameters on the Properties of Detonation Sprayed WC-12Co Coatings, *Thermal Spray 2001: New Surfaces for a New Millennium*, (Ed.) C.C. Berndt, K.A. Khor, and E.F. Lugscheider, ASM International, Materials Park, Ohio, USA, 2001, pp. 1031-1038.

TOTAL JOURNAL IMPACT FACTOR POINTS: 50+

GOOLE SCHOLAR METRICS:

Author search string	: Rama Krishna Lingamaneni
No. of citations till date	: 1200+
h-index	: 14
i-10 index	: 18
Source	: https://scholar.google.co.in

THESIS SUPERVISOR:

B.Tech	: 07
M.Tech	: 05
Ph.D.	: 01 submitted, 4 – in progress

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