

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

Dr. L. Rama Krishna is working as Scientist 'F', Centre for Engineered Coatings, Chairman-Aerospace Working Group, 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, Corrosion and Fatigue behavior of diverse materials, engineered coatings and thin films has been the field of his expertise.

Dr. L. Rama Krishna's outstanding scientific contributions merited him to receive numerous National/International awards and recognitions such as:

- ✓ **Secretary**, Indian Institute of Metals (IIM) – Hyderabad Chapter, Sept. 2020 onwards.
- ✓ **Member**, Defense & Aerospace Panel of Confederation of Indian Industry (CII), Hyderabad Chapter, August 2019 onwards.
- ✓ **Invited theme speaker**, National Frontiers of Engineering, Indian National Academy of Engineering, IIT Bhubaneswar, May-June 2019.
- ✓ **Fellow of Institution of Engineers (India)**, July 2018.
- ✓ **EDITOR**, Transactions of Indian Institute of Metals, (TIIM), Springer, 2017 onwards.

- ✓ **SECTION EDITOR**, "Ceramic Coatings and their Properties for Critical Applications" in "Handbook of Advanced Ceramics and Composites Applications", Springer Nature, 2018-19.
- ✓ **EDITORIAL BOARD MEMBER**: Journal of Materials Science and Surface Engineering (JMSSE) - 2015 onwards, Journal of Thermal Spray and Engineering (JTSE) – 2017 onwards.
- ✓ **DISTINGUISHED ALUMNI PROFESSIONAL ACHIEVEMENT AWARD**, National Institute of Technology, Warangal, 2016.

- ✓ **OUTSTANDING CONTRIBUTION IN REVIEWING**, Received from prestigious journals namely (a) Materials and Design, (b) Journal of Alloys and Compounds, (c) Surface and Coatings Technology, (d) Advanced Powder Technology, Elsevier, Amsterdam, The Netherlands, 2015.

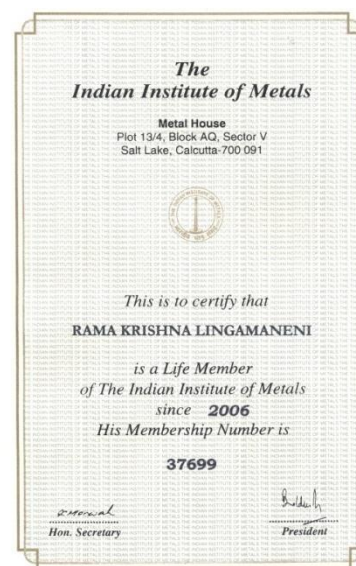


- ✓ **EXECUTIVE COUNCIL MEMBER**, Materials Research Society of India, Hyderabad Chapter, 2014 onwards.
- ✓ **CONVENOR**, Thermal Spray Coating Technologies (TSCOAT-2015), organized in association with Materials Research Society of India, 23 Sept. 2015.
- ✓ **EXECUTIVE ORGANIZING COMMITTEE MEMBER**: 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:** 2-day workshop conducted in association 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 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.
- ✓ **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, carries Rs. 20,000 cash prize, Rs. 1,00,000 lakh research grant, 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.

✓ **"PRESIDENT GOLD MEDAL"** – M.Tech thesis was nominated at IIT-K.

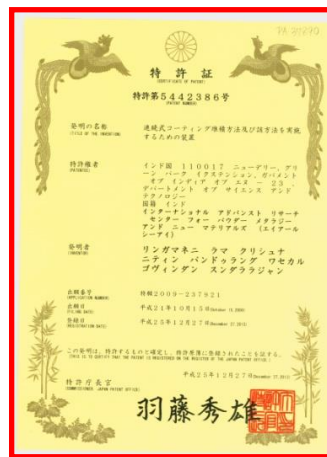
✓ **BEST ACADEMIC PERFORMANCE AWARD**, REC-Warangal, 1997

LIST OF PATENTS GRANTED:

Principal inventor of the following patents granted in Indian and abroad:

S. No.	DETAILS OF PATENT GRANTED
1.	US Patent # US 9,365,945 Process for continuous coating deposition and an apparatus for carrying out the process, <i>Date of grant: 14 June 2016</i>
2.	French Patent # FR 2937342 Method for Continuous Deposition of Coatings and Apparatus for Carrying out the Method, <i>Date of grant: 18 December 2015</i>
3.	US Patent # US 8,486,237 A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process, <i>Date of grant: 16 July 2013</i>
4.	JAPAN Patent # JP 5442386 A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process, <i>Date of grant: 27 December 2013</i>
5.	UK Patent # GB 2464378 A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process, <i>Date of grant: 15 May 2013</i>

6.	GERMAN Patent # DE 102009044256 A Process for Continuous Coating Deposition and an Apparatus for Carrying out the Process, <i>Date of grant: 12 May 2010</i>
7.	SOUTHAFRICA Patent # ZA200906786 A Process for continuous coating deposition and an apparatus for carrying out the process, Date of grant 26 May 2010.
8.	BRAZIL Patent # PI0904232-6 A Process for continuous coating deposition and an apparatus for carrying out the process, Date of grant 14 September 2010.
9.	INDIAN Patent # 209817 Process for forming ceramic coatings on metallic bodies and an apparatus for carrying out the process, <i>Date of grant: 06 Sept. 2007</i>
10.	US Patent # US 6,893,551 Process for forming ceramic coatings on metallic bodies and an apparatus for carrying out the process, <i>Date of grant: 17 May 2005</i>

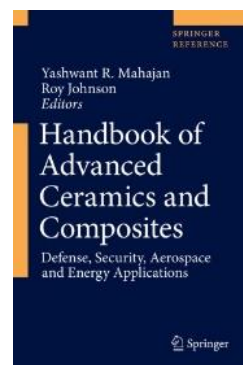


In addition to the aforementioned patents granted, the following patent application was also filed:

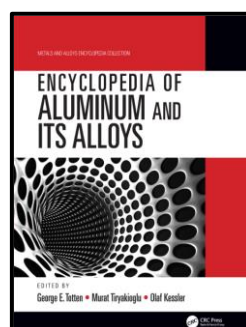
- ✓ **L. Rama Krishna, D. Srinivasa Rao, S.V. Joshi and G. Sundararjan**, Process and apparatus for protection of Structural Members from Wear, Corrosion and Fatigue Damage – *Indian Patent Appln # 1839/DEL/2015, June 2015.*

INVITED BOOK CHAPTERS:

- ✓ **L. Rama Krishna**, P. Suresh Babu, Manish Tak, D. Srinivasa Rao, G. Padmanabham and G. Sundararajan, *Processing of Ceramic and Cermet Coatings for Aerospace and Strategic Applications*, in *Handbook of Advanced Ceramics and Composites Applications*, Ed: Yashwant R Mahajan and Roy Johnson, Springer Nature, 2020, pp: 1465-1526.

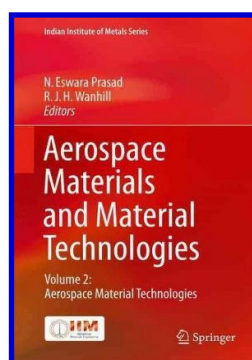


- ✓ **L. Rama Krishna** and G. Sundararajan, *Corrosion and Wear Protection through Micro Arc Oxidation Coatings in Aluminum and Its Alloys*, in "*Encyclopedia of Aluminum and Its Alloys*", Ed: George E. Totten, Olaf Kessler, Murat Tiryakioglu, Pubs: Taylor & Francis, 2018, pp: 386-399, ISBN-13:978-1466510807, ISBN-10: 1466510803.

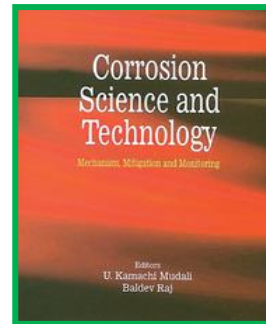


- ✓ P. Suresh Babu, D. Srinivasa Rao, **L. Rama Krishna**, G. Sundararajan and Arvind Agarwal, *Thermal Spray Coatings: Aluminum Alloy Protection*, in "*Encyclopedia of Aluminum and Its Alloys*", Ed: George E. Totten, Olaf Kessler, Murat Tiryakioglu, Pubs: Taylor & Francis, 2018, pp: 2680-2695, ISBN-13:978-1466510807, ISBN-10: 1466510803.

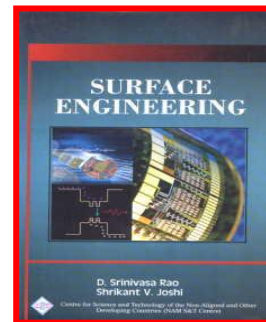
- ✓ D. Srinivasa Rao, **L. Rama Krishna** and G. Sundararajan, *Detonation Sprayed Coatings for Aerospace Applications*, in "*Aerospace Materials and Material Technologies*", Ed: N.E. Prasad, R.J.H. Wanhill, Pubs: Indian Institute of Metals Series, Springer Science + Business Media, Singapore, 2017, pp: 483-500, ISBN: 978-981-10-2143-5, DOI: 10.1007/978-981-10-2134-3_22.



- ✓ 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 Srikant V. Joshi, Pubs: NAM S&T Centre, Daya Publishing House, 2010 pp: 231-265, ISBN: 9788170356288.



BOARD / EXPERT COMMITTEE MEMBER:

- ✓ Vigilance Officer of ARCI from 2019 onwards
- ✓ Chairman: *Aerospace Working Group* at ARCI, 2017 onwards.
- ✓ Member – Board of Studies: (i) *Department of Materials & Metallurgical Engineering, NIT Warangal*, (ii) *Department of Mechanical Engineering, Amrita Viswa Vidya Peetham, Coimbatore*, (iii) *Department of Metallurgical and Materials Engineering, RGUKT, Nuzvid*, (iv) *Department of Mechanical Engineering, PVP Siddhartha Institute of Technology, Vijayawada*.
- ✓ Editorial board Member: *Journal of Materials Science and Surface Engineering* - 2014 onwards
- ✓ Member, Various Screening & Recruitment Boards, Policy Making and Implementation committees, Procurement Committees, ARCI – 2015 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
- ✓ Scientists/JRF/SRF Screening and Recruitment Interview Board Member, *International Advanced Research Centre, Hyderabad* – 2014, 2016

- ✓ 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*, *Journal of American Ceramic Society*, *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*, *Advanced Powder Technology*.



INVITED REVIEW ARTICLES:

- ✓ P. Suresh Babu, Y. Madhavi, **L. Rama Krishna**, G. Sivakumar, D. Srinivasa Rao and G. Padmanabham, Thermal Spray Coatings for Erosion-Corrosion Resistant Applications, *Transactions of Indian Institute of Metals* 73 (9) (2020) 2141-2159.
- ✓ Nitin P. Wasekar, **L. Rama Krishna**, D. S. Rao, G. Padmanabham, Novel Nanostructured Coatings by Pulsed Electrodeposition, *Indian Engineering Exports*, 12 (7) (2019), 16-24.
- ✓ **L. Rama Krishna**, Y. Madhavi, P.S. Babu, D. S. Rao, G. Padmanabham, Strategies for Corrosion Protection of Non-ferrous Metals and Alloys Through Surface Engineering, *Materials Today: Proceedings* 15 (2019) 145-154.
- ✓ P.S. Babu, Y. Madhavi, **L. Rama Krishna**, D. S. Rao, G. Padmanabham, Thermally Sprayed WC-based Cermet Coatings for Corrosion Resistance Applications, *JOM* 70 (11) (2018) 2636-2649.
- ✓ G. Sundararajan, S.V. Joshi and **L. Rama Krishna**, Engineered Coatings for the Automotive Engine and Power Train Components, *Current Opinion in Chemical Engineering* 11 (2016) 1-6.
- ✓ **L. Rama Krishna** and G. Sundararajan, Aqueous Corrosion Behavior of Micro Arc Oxidation (MAO) Coated Magnesium alloys – A Critical Review, *JOM* 66 (6) (2014) 1045-1060.

✓ **CONTRIBUTED JOURNAL ARTICLES:**

- ✓ D.V. Lakshmi, P.S. Babu, **L. Rama Krishna**, R. Vijay, D.S. Rao, G. Padmanabham, Corrosion and Erosion behavior of Iron Aluminide (FeAl(Cr)) coating deposited by Detonation Spray Technique, *Advanced Powder Technology*, 2021 (Published)
- ✓ Y. Madhavi, **L. Rama Krishna**, N. Narasaiah, Corrosion-fatigue performance of hard anodized, MAO coated 2024-T3 and 7075-T6 aerospace Al alloys, *Transactions of Indian Institute of Metals* 32 (2021) 2192-2201.
- ✓ E. Lokeshkumar, P. Manojkumar, A. Saikiran, C. Premchand, S. Hariprasad, **L. Rama Krishna**, N. Rameshbabu, Fabrication of Ca and P containing niobium oxide ceramic coatings on niobium by PEO coupled EPD process, *Surface and Coatings Technology*, 416 (2021) 127161.
- ✓ Y. Madhavi, **L. Rama Krishna** and N. Narasaiah, Corrosion-Fatigue Behavior of Micro Arc Oxidation Coated 6061-T6 Al alloy, *International Journal of Fatigue*, 142 (2021) 105965.
- ✓ Y. Madhavi, **L. Rama Krishna**, N. Narasaiah, Influence of Surface Roughness on the Corrosion-Fatigue Behavior of MAO Coated 6061-T6 Al alloy Assessed in NaCl medium, *Surface and Coatings Technology*, 414 (2021) 127102.
- ✓ S. Hariprasad, A. Saikiran, Ch. Premchand, **L. Rama Krishna**, N. Remshbabu, Fabrication of Ceramic Coatings on the Biodegradable ZM21 Magnesium Alloy by PEO Coupled EPD Followed by Laser Texturing Process, *Journal of Magnesium and Alloys*, 2020 (In press)
- ✓ N.P. Wasekar, B. Lavakumar, **L. Rama Krishna**, D.S. Rao and G. Padmanabham, Pulsed electrodeposition, Mechanical Properties and Wear Mechanism in Ni-W/SiC Nanocomposite Coatings Used for Automotive Applications, *Applied Surface Science*, 527 (2020) 146896.
- ✓ V. Srinivasa Rohit, A. Venu Gopal and **L. Rama Krishna**, A New Approach in Establishing Stable Machining Parameters Using Frame Statistics and Kurtosis. In: Voruganti H., Kumar K., Krishna P., Jin X. (eds) *Advances in Applied Mechanical Engineering, Lecture Notes in Mechanical Engineering, Singapore, 2020 pp: 1159-1167*.
- ✓ A. Saikiran, S. Hariprasad, P. Manojkumar, **L. Rama Krishna**, N. Rameshbabu, Effect of laser treatment on morphology and corrosion

behavior of the plasma electrolytic oxidation coatings developed on aluminized steel, *Surface and Coatings Technology*, 394 (2020) 125888.

- ✓ N.S. Anas, R.K. Dash, R. Vijay, **L. Rama Krishna**, Tribological Performance of CNT/Ni coated CNT Dispersed Al Alloys Produced by Mechanical Milling and Hot Extrusion, *Journal of Materials Engineering & Performance*, 29 (2020) 1630-1639.
- ✓ V.S. Rohit, A. Venu Gopal, **L. Rama Krishna**, Dynamic force signal analysis in dry finish turning of Aluminium metal matrix composites, E3S Web of Conferences ICMED 184 (2020) 01072
- ✓ Y. Madhavi, **L. Rama Krishna**, N. Narasaiah, Influence of micro arc oxidation coating thickness and prior shot peening on the fatigue behavior of 6061-T6 Al alloy, *International Journal of Fatigue*, 126 (2019) 297-305.
- ✓ A. Saikiran, S. Hariprasad, S. Arun, **L. Rama Krishna**, N. Rameshbabu, Effect of electrolyte composition on morphology and corrosion resistance of plasma electrolytic oxidation coatings on aluminized steel, *Surface and Coatings Technology*, 372 (2019) 239-251.
- ✓ **L. Rama Krishna**, Y. Madhavi, T. Sahithi, D. Srinivasa Rao, S.V.K. Ijeri, Om Prakash, S.P. Gaydos, Enhancing the high cycle fatigue life of high strength aluminum alloys for aerospace applications, *Fatigue and Fracture of Engineering Materials and Structures*, 42 (2019) 698-709.
- ✓ R. Ghosh, A. Venugopal, P.I. Pradeep, **L. Rama Krishna**, P.R. Narayanan, B. Pant, R.M. Cherian, Effect of Microstructure on the Environmentally Induced Cracking Behavior of Al-Zn-Mg-Cu-Zr Aluminum Alloy, *Corrosion Science and Technology*, 17 (3) (2018) 101-108.
- ✓ **L. Rama Krishna**, Y. Madhavi, T. Sahithi, N.P. Wasekar, N.M. Chavan, D.S. Rao, Influence of prior shot peening variables on the fatigue life of micro arc oxidation coated 6061-T6 Al alloy, *International Journal of Fatigue*, 106 (2018) 165-174.
- ✓ P. Suresh Babu, D. Sen, A. Jyothirmayi, **L. Rama Krishna**, D. Srinivasa Rao, Influence of microstructure on the wear and corrosion behavior of detonation sprayed Cr₂O₃-Al₂O₃ and plasma sprayed Cr₂O₃ coatings, *Ceramics International*, 44(2) (2018) 2351-2357.
- ✓ P. Suresh Babu, P. Chanikya Rao, A. Jyothirmayi, P. Sudharshan Phani, **L. Rama Krishna**, D. Srinivasa Rao, Evaluation of microstructure, property and performance of detonation sprayed WC-(W,Cr)₂C-Ni coatings, *Surface and Coatings Technology*, 335 (2018) 345-354.

- ✓ 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, *Ceramics International*, 44(1) (2018) 874-884.
- ✓ 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.
- ✓ T. Arunnellaiappan, M. Ashfaq, **L. Rama Krishna**, N. Rameshbabu, Fabrication of Corrosion-resistant Al₂O₃-CeO₂ Composite Coatings on AA7075 via Plasma Electrolytic Oxidation Coupled with Electrophoretic Deposition, *Ceramic International*, 42 (2016) 5897-5905.
- ✓ A. Venugopal, J. Srinath, **L. Rama Krishna**, P.R. Narayanan, S.C. Sharma and P.V. Venkitakrishnan, Corrosion and Nanomechanical Behaviors of Plasma Electrolytic Oxidation Coated AA7020-T6 Aluminum Alloy, *Materials Science & Engineering A*, 660 (2016) 39-46.
- ✓ T. Arunnellaiappan, N. Kishorebabu, **L. Rama Krishna**, N. Rameshbabu, Influence of Frequency and Duty cycle on Microstructure of Plasma Electrolytic Oxidized AA7075 and the Correlation to its Corrosion Behavior, *Surface and Coatings Technology* 280 (2015) 136-147.
- ✓ **L. Rama Krishna**, P.S.V.N.B. Gupta and G. Sundararajan, The Influence of Phase Gradient within the Micro Arc Oxidation (MAO) Coatings on Mechanical and Tribological Behaviour, *Surface and Coatings Technology* 269 (2015) 54-63.
- ✓ **L. Rama Krishna**, A. Jyothirmayi and G. Sundararajan, Relative Hardness and Corrosion Behavior of micro arc oxidation coatings formed on binary and ternary magnesium alloys, *Materials & Design* 77 (2015) 6-14.
- ✓ K.R.C. Somaraju, A. Jyothirmayi, **L. Rama Krishna**, and R. Subasri, Corrosion Behavior of Anodized and Sol-gel Duplex Coatings on Aluminum, International Conference & Exhibition on Corrosion, *CORCON*, 2015, Nace International Gateway India Section, CL-09, 2015.

- ✓ M. Sandhyarani, N.R. Babu, K. Venkateswarlu, **L. Rama Krishna**, Fabrication, Characterization and in-vitro evaluation of nanostructured zirconia/hydroxyapatite composite film on zirconium, *Surface and Coatings Technology* 238 (2014) 58-67.
- ✓ **L. Rama Krishna**, G. Poshal, A. Jyothirmayi and G. Sundararajan, Compositionally Modulated CGDS+MAO Duplex Coatings for Corrosion Protection of AZ91 Magnesium Alloy, *Journal of Alloys and Compounds* 578 (2013) 355-361.
- ✓ 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.
- ✓ A. Ranade. **L. Rama Krishna**, Z. Li, J. Wang, C. Korach, Y.-W. Chung, Relationship between Hardness and Fracture Toughness in Ti-TiB₂ Nanocomposite Coatings, *Surface and Coatings Technology* 213 (2012) 26-32.
- ✓ A. Venugopal, R. Panda, S. Manwatkar, K. Sreekumar, **L. Rama Krishna**, G. Sundararajan, Effect of micro arc oxidation treatment on localized corrosion behaviour of AA7075 aluminum alloy in 3.5% NaCl solution, *Trans. Nonferrous Met. Soc. China* 22 (2012) 700–710.
- ✓ A. Venugopal, R. Panda, S. Manwatkar, K. Sreekumar, **L. Rama Krishna**, G. Sundararajan, Effect of Microstructure on the Localized Corrosion and 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.
- ✓ **L. Rama Krishna**, G. Poshal and G. Sundararajan, Influence of Electrolyte Chemistry on Morphology and Corrosion Resistance of Micro Arc Oxidation Coatings Deposited on Magnesium, *Metallurgical and Materials Transactions A*, 41A (2010) 3499-3508.
- ✓ N. P. Wasekar, N. Ravi, P.S. Babu, **L. Rama Krishna** and G. Sundararajan, High-cycle Fatigue Behavior of Micro arc 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 Micro arc Oxidation and Hard Anodized Coatings", *Wear*, 261 (2006) 1095-1101.
- ✓ B. Deo, **L. Rama Krishna**, A. Dey and R. Boom, "Strategies for Development of Process Control Models for Hot Metal Desulfurization: Conventional and AI Techniques", *Materials and Manufacturing Processes*", Vol. 20, 2005, 407-419.
- ✓ 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.
- ✓ **L. Rama Krishna**, K.R.C. Somaraju and G. Sundararajan, "Tribological Performance of Ultra-Hard Ceramic Composite Coatings Obtained through Microarc Oxidation", *Surface and Coating Technology*, Vol.163-164, 2003, 484-490.
- ✓ 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.

- ✓ **L. Rama Krishna**, D. Sen, Y.S. Rao, G.V.N. Rao and G.Sundararajan, "Thermal Spray Coating of Aluminium Nitride utilizing Detonation Spray Technique", *Journal of Materials Research*, Vol.17 (10) 2002, 2514-2523.
- ✓ 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: 175+

GOOLE SCHOLAR METRICS:

Author search string : Dr. L. Rama Krishna
 No. of citations : 2200+
 h-index : 22
 i-10 index : 36
 Source : <https://scholar.google.co.in>

THESIS GUIDANCE:

Thesis guidance offered to a spectrum of students including two Ph.D's awarded, 2 Ph.D's thesis submitted, 1 Ph.D in progress while 06 M.Tech / M.Sc thesis works and 12 B.Tech projects were supervised.

CONTACT DETAILS:

Dr. Rama Krishna L
 Scientist – 'F', Centre of excellence for Engineered Coatings (CEC)
 Chairman – Aerospace Materials Group
 International Advanced Research Centre (ARCI)
 Balapur (PO)
 Hyderabad – 500 005
 INDIA
 Ph: +91 40 24452 327 (O)
 +91 99891 88876 (M)
 Email: lrama@arci.res.in; lingamaneni2000@yahoo.com
 URL: www.arci.res.in