

## Editorial

Deepak Dubal<sup>1</sup> · Rudolf Holze<sup>2</sup>

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Each person's life is a story but some stories create histories. This special issue is a tribute to such a great person, Chandrakant D. Lokhande, who dedicated his entire life to science and effectively shaped the careers of many young minds. With this tribute on the occasion of his 60th birthday, the scientific community, particularly his students, friends, and colleagues, wish to recognize his outstanding contribution to the field of Semiconductor Thin Films, to which he has devoted his professional life. C.D. Lokhande's research has made a profound impact on several areas of thin film technology, ranging from chemical synthesis of thin films to their applications in solar cells,

gas sensors, and supercapacitors. Moreover, he made a great contribution in designing several prototype devices such as supercapacitors and heterojunction-based room temperature gas sensors.

C.D. Lokhande was born in Wasud-Akola, a small village in Maharashtra, one of the states in India, 60 years ago on December 6, 1956. He is one of those persons we surely recognize as being blessed and honored to enjoy and celebrate this anniversary. He got a Ph.D. from Shivaji University, Kolhapur in 1984, without viva voce examination as his thesis was adjudged as “*Excellent*.” Later, in 1987, he joined as assistant professor in Physics at Shivaji University, Kolhapur, immediately after accomplishing his first postdoctoral stay at the Weizmann Institute of Science, Israel. After a long and productive career in science, which was temporarily interrupted by his retirement from the position of Head, Department of Physics at Shivaji University, Kolhapur in May 2016, he continued research as a Research Director and Professor at the D. Y. Patil University, Kolhapur.

C.D. Lokhande has won many awards and received many honors. He was appointed as Fellow of Institute of Physics, London, in 1990; was visiting scientist in the Indo-Polish CEP scheme in 1991; was INSA Visiting Fellow in 1993; is the first recipient from Shivaji University of the prestigious Alexander von Humboldt Fellowship, Germany, in 1996 and Brain Pool fellowship of South Korea in 2003; was participant in Noble Laureates Meeting, Lindau, Germany in 2001; was visiting professor at Hanyang University, South Korea in 2006; was awarded a Rajya Shishak Purshakar, Government of Maharashtra State in 2009, and Best Teacher Award from Shivaji University in 2010. In addition, he has visited many foreign countries such as USA, UK, Germany, China, Japan, South Korea, Israel, France etc., for research talks.

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✉ Rudolf Holze  
Rudolf.holze@chemie.tu-chemnitz.de

<sup>1</sup> Catalan Institute of Nanoscience and Nanotechnology, ICN2, Barcelona, Spain

<sup>2</sup> Chemnitz University of Technology, Chemnitz, Germany

C.D. Lokhande is presently an editorial board member of “Electrochemical Energy Technology,” De Gruyter; the fellow, Maharashtra Academy of Sciences from 2012; an expert member, DST Committee on Hydrogen Production from 2012; distinguished visiting professor in polymer chemistry, Institute of Chemical Technology, Mumbai from 2012. The long list of distinguished accomplishments and awards is a proof of the high regard in which he is held in the scientific community.

C.D. Lokhande is the author of more than 500 papers in international journals with “h” index 67 and more than 16,600 citations, edited 9 books, filed more than 45 patents, and directed more than 55 Ph.D. theses. According to the “Journal of Library & Information Technology” published in 2012, Prof Lokhande ranked 11th in the list of the most productive scientists in materials science (2000–2010) in India, ranked second in the average citation per article, and 4th in “h” index for the above period. In addition, “Recent Research in Science and Technology” published in 2011, confirmed that C.D. Lokhande has been ranked 11th in solar energy research in India during the period 1999–2011. We wish him, and we are sure that all the scientific community will join us in wishing him, good health and further outstanding contributions to our field for many years to come.

Selected publications of all former students of C.D. Lokhande:

(One per student)

- S. S. Dhumure, C. D. Lokhande, Solar energy materials and solar cells, 1992, 28, 159.
- S. B. Jundale, C. D. Lokhande, Solar energy materials and solar cells, 1992, 28, 151.
- S. A. Jodgudri, U.K. Mohite, K. M. Gadave, C. D. Lokhande, Indian Journal of Pure and Applied Physics, 1994, 32, 772.
- J. D. Desai, C. D. Lokhande, Journal of non-crystalline solids, 1995, 181, 70.
- U. K. Mohite, C. D. Lokhande, Applied surface science, 1996, 92, 151.
- K. M. Gadave, S. A. Jodgudri, C. D. Lokhande, Thin Solid Films, 1994, 245, 7.
- S. S. Kale, U. S. Jadhav, C. D. Lokhande, Bulletin of Electrochemistry, 1996, 12, 540.
- S. J. Lade, C. D. Lokhande, Materials Chemistry and Physics, 1997, 49, 160.
- R. S. Mane, B. R. Sankapal, C. D. Lokhande, Materials Chemistry and Physics 1999, 60, 196.
- B. R. Sankapal, R. S. Mane, C. D. Lokhande, Materials research bulletin, 2000, 35, 177.
- S. D. Sartale, C. D. Lokhande, Materials Chemistry and Physics, 2000, 65, 63.
- R. R. Ahire, B. R. Sankapal, C. D. Lokhande, Materials research bulletin, 2001, 36, 199.
- G. D. Bagde, S. D. Sartale, C. D. Lokhande, Applied Surface Science, 2003, 214, 27.
- H. M. Pathan, C. D. Lokhande, D. P. Amalnerkar, T. Seth, Applied surface science, 2003, 218, 291.
- R. B. Kale, C. D. Lokhande, Applied Surface Science, 2004, 223, 343.
- V. L. Mathe, K. K. Patankar, C. D. Lokhande, Ferroelectrics, 2005, 327, 57.
- S. S. Kulkarni, C. D. Lokhande, Materials Chemistry and Physics, 2003, 82, 151.
- T. P. Gujar, V. R. Shinde, C. D. Lokhande, R. S. Mane, S. H. Han, Applied Surface Science, 2005, 250, 161.
- V. V. Todkar, R. S. Mane, C. D. Lokhande, S. H. Lee, S. H. Han, Electrochimica Acta, 2006, 51, 4674.
- V. R. Shinde, T. P. Gujar, C. D. Lokhande, Sensors and Actuators B: Chemical, 2007, 120, 551.
- R. S. Patil, T. P. Gujar, C. D. Lokhande, R. S. Mane, S. H. Han, Solar energy, 2007, 81, 648.
- S. S. Joshi, T. P. Gujar, V. R. Shinde, C. D. Lokhande, Sensors and Actuators B: Chemical, 2008, 132, 349.
- M. More, J. L. Gunjekar, C. D. Lokhande, Sensors and Actuators B: Chemical, 2008, 129, 671.
- J. L. Gunjekar, A. M. More, C. D. Lokhande, Sensors and Actuators B: Chemical, 2008, 131, 356.
- V. D. Patake, C. D. Lokhande, O. S. Joo, Applied Surface Science, 2009, 255, 4192.
- S. G. Kandalkar, J. L. Gunjekar, C. D. Lokhande, O. S. Joo, Journal of Alloys and Compounds, 2009, 478, 594.
- R. R. Salunkhe, D. S. Dhawale, D. P. Dubal, C. D. Lokhande, Sensors and Actuators B: Chemical, 2009, 140, 86.
- U. M. Patil, K. V. Gurav, V. J. Fulari, C. D. Lokhande, O. S. Joo, Journal of Power Sources, 2009, 188, 338.
- K. V. Gurav, V. J. Fulari, U. M. Patil, C. D. Lokhande, O. S. Joo, Applied Surface Science, 2010, 256, 2680.
- R. J. Deokate, D. S. Dhawale, C. D. Lokhande, Sensors and Actuators B: Chemical, 2011, 156, 954.
- D. S. Dhawale, D. P. Dubal, V. S. Jamadade, R. R. Salunkhe, S. S. Joshi, C. D. Lokhande, Sensors and Actuators B: Chemical, 2010, 145, 205.
- D. P. Dubal, D. S. Dhawale, R. R. Salunkhe, C. D. Lokhande, Journal of the Electrochemical Society, 2010, 157, A812.
- S. B. Kulkarni, S. S. Joshi, C. D. Lokhande, Chemical Engineering Journal, 2011, 166, 1179.
- V. S. Jamadade, D. S. Dhawale, C. D. Lokhande, Synthetic Metals, 2010, 160, 955.
- S. N. Pusawale, P. R. Deshmukh, C. D. Lokhande, Applied Surface Science, 2011, 257, 9498.

36. P. R. Deshmukh, S. N. Pusawale, V. S. Jamadade, U. M. Patil, C. D. Lokhande, *Journal of Alloys and Compounds*, 2011, 509, 5064.
37. S. V. Patil, P. R. Deshmukh, C. D. Lokhande, *Sensors and Actuators B: Chemical*, 2011, 156, 450.
38. D. Jagdale, V. S. Jamadade, S. N. Pusawale, C. D. Lokhande, *Electrochimica Acta*, 2012, 78, 92.
39. N. M. Shinde, C. D. Lokhande, J. H. Kim, J. H. Moon, *Journal of Photochemistry and Photobiology A: Chemistry*, 2012, 235, 14.
40. G. S. Gund, D. P. Dubal, B. H. Patil, S. S. Shinde, C. D. Lokhande, *Electrochimica Acta*, 2013, 92, 205.
41. S. S. Shinde, G. S. Gund, V. S. Kumbhar, B. H. Patil, C. D. Lokhande, *European Polymer Journal*, 2013, 49, 3734.
42. V. S. Kumbhar, A. D. Jagdale, C. D. Lokhande, *Journal of Power Sources*, 2013 234, 107.
43. S. B. Jambure, S. J. Patil, A. R. Deshpande, C. D. Lokhande, *Materials Research Bulletin* 2014, 49, 420.
44. B. H. Patil, S. J. Patil, C. D. Lokhande, *Electroanalysis*, 2014, 26, 2023.
45. R. N. Bulakhe, C. D. Lokhande, *Sensors and Actuators B: Chemical*, 2014, 200, 245.
46. N. R. Chodankar, D. P. Dubal, G. S. Gund, C. D. Lokhande, *Electrochimica Acta*, 2015, 165, 338.
47. S. J. Patil, R. N. Bulakhe, C. D. Lokhande, *ChemPlusChem*, 2015, 80, 1478.
48. B. Bhalerao, B. G. Wagh, R. N. Bulakhe, A.D. Jagdale, C. D. Lokhande, *Advanced Science Letters*, 2016, 22, 759.
49. M. Patil, A. C. Lokhande, N. R. Chodankar, V. S. Kumbhar, C. D. Lokhande, *Materials & Design*, 2016, 97, 407.
50. P. A. Shinde, V. C. Lokhande, N. R. Chodankar, T. Ji, J. H. Kim, *Journal of Colloid and Interface Science*, 2016, 483, 261.
51. Yadav, A. C. Lokhande, R. B. Pujari, J. H. Kim, C. D. Lokhande, *Journal of Colloid and Interface Science*, 2016, 484, 51.
52. R. B. Pujari, A. C. Lokhande, A. A. Yadav, J. H. Kim, C. D. Lokhande, *Materials & Design*, 2016, 108, 510.
53. A. V. Shinde, N. R. Chodankar, V. C. Lokhande, A. C. Lokhande, T. Ji, J. H. Kim, C. D. Lokhande, *RSC Adv.*, 2016, 6, 58,839.
54. R. Shelke, A. V. Ghule, Y. P. Lee, C. D. Lokhande, N. G. Deshpande, *Journal of Alloys and Compounds*, 2017, 692, 522.