EDITORIAL BOARD

Editorial Advisor:
Arvindkumar, Professor & Director, Homi Bhabha Centre for Science Education, TIFR, Mumbai, India.

Editorial Coordinator:
Rupali Akerkar Technomathematics Research Foundation, Kolhapur, India.

Editors:
Carmen Batanero, University of Granada, Campus de Cartuja, Granada, Spain.
Lokenath Debnath, Chair Professor of Mathematics, University of Texas-Pan American, Edinburg, Texas, USA.
Paul Ernest, Emeritus Professor of Mathematics Education, University of Exeter, UK.
Laxman Hegde, Professor of Statistics, Frostburg State University, Frostburg, USA.
A. Krishnamoorthy, Professor & Head, Mathematics Department, Cochin University of Science & Technology, Kochi, India.
Hee-chan Lew, Professor of Mathematics Education, Korea National University of Education, Chungbuk, South Korea.
Victor Ohanyan, Professor of Mathematics, American University of Armenia, Armenia.
D. P. Patil, Professor of Mathematics, Indian Institute of Science, Bangalore, India.
L. Radhakrishna, Retd. Professor & Head, Department of Mathematics Shivaji University, India.
Geetha S. Rao, Retd. Professor, Ramanujan Institute, University of Madras, Chennai, India.
V Ravichandran, Reader, Department of Mathematics, University of Delhi, India.
Fernando Diez Rubio, Departamento de Ingeniería Informática, Universidad Autonoma de Madrid, Spain.
Anand P. Singh, Professor of Mathematics, University of Jammu, Jammu, India.
Arindama Singh, Professor of Mathematics, Indian Institute of Technology Madras, Chennai, India.
Nada Stehlikova, Faculty of Education, Charles University, Prague, Czech Republic.
K. G. Subramanian, Professor of Mathematics, Universiti Sains Malaysia, Malaysia.
Mike Thomas, A/Prof. & Head, Mathematics Education Unit, The University of Auckland, Auckland, New Zealand.

Editorial Office: Technomathematics Research Foundation, 204/17 Kh, New Shahupuri, Kolhapur 416001, India.
E-mail: director@tmrfindia.org

Copyright ©2011 Technomathematics Research Foundation.

All rights reserved. This journal issue or parts thereof may not be reproduced in any form or by any means, electrical or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the copyright owner.
Permission to quote from this journal is granted provided that the customary acknowledgement is given to the source.
Sutra: International Journal of Mathematical Science Education (ISSN 0974 – 3340) is high quality electronic journal published six-monthly by Technomathematics Research Foundation, Kolhapur, India.
URL: www.tmrfindia.org/sutra.html.
CONTENTS (Vol. 4, No. 1, 2011)

1. NECESSARY AND SUFFICIENT OPTIMALITY CONDITIONS FOR NONLINEAR FUZZY OPTIMIZATION PROBLEM 1—16
   V. D. PATHAK · U. M. PIRZADA

2. SUBCLASSES OF P-VALENT STARLIKE FUNCTIONS DEFINED BY USING CERTAIN FRACTIONAL DERIVATIVE OPERATOR 17—32
   SOMIA MUFTAH AMSHERI AND VALENTINA ZHARKOVA

3. ANALYSIS OF THE ROLE OF ENTROPIES AND ASSIGNMENT OF RANKS TO THE FEATURES IN GENRE DISCRIMINATION 33—48
   HEMLATA PANDEA AND H. S. DHAMIB

4. IDENTIFYING AND SEQUENCING OF THE ELEMENTARY CONCEPTS OF MEASUREMENT OF MASS 49—58
   S K. SAMSUL ALAM

5. THE CENTROID OF SOME GENERALIZED PEDAL CONFIGURATIONS 59—72
   SZILÁRD ANDRÁS

Cover graphics: complex function atan(z) using Mathlab