Second Academic Sessions

27



Proceedings of the Second Academic Sessions University of Ruhuna

16th December, 2004

Editorial Board

Prof. M. de S. Liyanage (Editor-in-Chief)

| | (Professor of Crop Science, Faculty of Agriculture) |
|--------------------------|--|
| Prof. M.P. de Silva | (Professor of Botany, Faculty of Science) |
| Prof. S. Lecamvasam | (Professor of Medicine, Faculty of Medicine) |
| Dr. R.M. Ranaweera Banda | (Senior Lecturer, Department of Sociology, Faculty of Humanities and Social Sciences) |
| Mr. R.M. Ratnayake | (Senior Lecturer, Department of Management and Entrepreneurship, |
| | Faculty of Management and Finance) |
| Dr. G.H.A.C. Silva | (Senior Lecturer, Department of Civil Engineering, Faculty of |
| | Engineering) |
| Mr. Nimal Hettiarachchi | (Senior Assistant Librarian) |
| | (ð , |

AR - 4571

ISSN: 1391-8613

.

All Rights Reserved

© 2004 Editorial Board, Second Academic Sessions University of Ruhuna Matara Sri Lanka

No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means, electronic or mechanical, including, recording or by any information storage and retrieval system, without written permission from the copyright board of the Academic Sessions, University of Ruhuna, Matara, Sri Lanka.

Editorial Board Second Academic Sessions University of Ruhuna Matara, Sri Lanka. 31st January 2005

Preface

Following the success of the First Academic Sessions held in July 2003, as part of the Silver Jubilee Celebrations, the University of Ruhuna decided to host the Second Academic Sessions in December 2004 on the theme "Research for National Development".

The main purpose of organizing this annual academic event is to bring together both academics and students of the six faculties and provide a common forum to present their latest research findings and transfer the knowledge and experience gained to their colleagues, academic community and stakeholders. Further, it provides a good opportunity for both staff and students to demonstrate their research, innovative and entrepreneurial skills and broaden their intellectual horizons.

The Second Academic Sessions are considered unique for several reasons. In addition to the oral sessions, this year, the Organizing Committee has decided to include a poster session and a display of innovations and inventions; with the aim of encouraging wider participation of both academics and students. Further, the best presenters at the oral and poster sessions will be rewarded. One of the thrust areas of the University is to conduct high impact research and doing research alone is a futile exercise, unless research outcomes are disseminated to create an impact on the national development.

This publication carries 42 research papers (28 orals and 14 posters) contributed by the academic staff and students of the Faculties of Agriculture, Humanities and Social Sciences, Management and Finance, Medicine and Science of the Ruhuna University. I wish to extend my sincere thanks and gratitude to the authors and co-author of papers, the reviewers and academic and non-academic staff for their assistance and co-operation in making this event a success.

Prof. M. de S. Liyanage Editor-in-Chief 31st January 2005

Message of the Vice Chancellor

I am pleased to send this message felicitating the staff and students who would be making presentations at the Second Academic Sessions of the University of Ruhuna. We held the First Academic Sessions in 2003 - the Silver Jubilee Year of the university, and it is heartening to note that this year, in addition to staff, students have also taken an active part in the academic sessions, giving it a new dimension.

As a university committed to academic excellence, high impact research, community development and international cooperation, we are proud to witness an improvement both in quality and relevance of research performed by our staff. In keeping with our vision of creating a multidisciplinary borderless university, we are keen to see more and more research being undertaken across disciplinary boundaries, forming dynamic and winning multidisciplinary teams with synergies.

This year, we introduced the Vice Chancellor's Awards Scheme with a view to honouring and recognizing the outstanding staff and students of the university and motivating the staff for excellence. Under this motivation award scheme, we will be rewarding the most outstanding senior scientist, most outstanding junior scientist, most outstanding staff innovator, most outstanding student innovator, most outstanding department of study, highest research grants recipient and most outstanding international relations promoter. As far as we are aware, this is the first time in the whole university system of the country that a Vice Chancellor's awards scheme has been introduced to motivate and encourage the staff. We decided to hold this landmark event in conjuction with the second academic sessions and have invited Her Excellency Nirupama Rao, the Indian High Commissioner of Sri Lanka as the Chief Guest and Prof. Carol Amarathunga of University of Ottawa, Canada as the Guest of Honour in keeping with our global mindedness and the significance of the occasion.

It is our hope this dual event will promote and foster academic excellence, high impact interdisciplinary research, community service and international linkages, making the University of Ruhuna not only a leader but also a model in the higher education landscape of the country.

While heartily congratulating the Vice Chancellor's awards recipients and expressing my deep gratitude to the Organizing Committee headed by Prof. M. de S. Liyanage for organizing this event in a dignified and fitting manner, I wish the Second Academic Sessions every success.

Prof. Ranjith Senaratne Vice Chancellor 31st January 2005