



UNIVERSITY OF
BIRMINGHAM



INTERNATIONAL ROAD FEDERATION
FEDERATION ROUTIERE INTERNATIONALE

RURAL ROADS FOR DEVELOPMENT 2018

Department of Civil Engineering
School of Engineering
College of Engineering and
Physical Sciences
University of Birmingham
Edgbaston
Birmingham B15 2TT
United Kingdom

September, 2018

Dear Course Delegate,

On behalf of the University of Birmingham we would like to welcome you to the 2018 Rural Roads for Development residential course. We have put together a programme of lectures and workshops to offer you a forum for learning and discussion, and also for sharing and exchanging knowledge and expertise. The speakers this week are world authorities in their field and they will be most pleased to answer your questions and listen to your views. Please interact with them as much as possible. We hope that you will enjoy the course but also that you will take the opportunity to have a look around the University campus and also the surrounding area. You will notice a lot of new building work being carried out around the campus including our new library and our new sports hall with its Olympic sized swimming pool. Try to visit the Barber Institute of Fine Arts, a very fine small art gallery, admission to which is free, and it is just a few minutes walk from the Department of Civil Engineering. Here you can see paintings by world renowned artists including amongst others Renoir, Monet, Manet, van Gough, Le Trec, Maigret and Constable. When you find time may we suggest that you visit Birmingham city centre, once at the heart of the Britain's industrial revolution and now famous for the Bullring shopping centre and Birmingham Gateway. It has many kilometres of canals which played a vital role in transporting goods during much of the early parts of the industrial revolution. A number of famous industrial pioneers and scientists such as Matthew Bolton, Josiah Wedgwood and Erasmus Darwin were born in the West Midlands area and together they formed the renowned Lunar Society. Great philanthropists, many of whom made their fortunes from the industrial revolution, have given much of their wealth to the benefit of succeeding generations. Perhaps the best example is that of the Cadbury family. Their legacy is the enchanting district of Bournville developed in 1879 when the Cadbury family moved their chocolate factory from the centre of Birmingham to the area. The Cadburys began to develop their factory in the new suburb and built beautiful houses and recreational facilities for their workforce. Loyal and hard-working workers were treated with great respect, relatively high wages and good working conditions. Cadbury also pioneered pension schemes, joint works committees and a full staff medical service. Bournville and the chocolate factory are a 15 minute walk from the University and are well worth visiting.

Enjoy the course as much as you can and if you have any queries our administrative staff and we would be only too pleased to help.

Kind Regards,

Dr Michael Burrow

Dr Gurmel Ghataora

Day 1 (September 10):
Rural Roads for Development

Session

0815-0845	0	Registration
0845-0930	1	Introduction and welcome to course Dr Gurmel Ghataora and Dr Michael Burrow, University of Birmingham
0930 -1100	2	Including the Social Benefits of Rural Roads in Investment Appraisals John Hine, formerly of TRL Ltd and the World Bank
1100 -1130		Break: Tea/Coffee
1130 - 1230	3	The role & Importance of Planning and Prioritisation John Hine, formerly of TRL Ltd and the World Bank
1230 - 1330		Lunch
1330 - 1530	4	The Rural Transport System Introducing and planning transport services John Hine, formerly of TRL Ltd and the World Bank
1530 - 1600		Break: Tea/Coffee
1600 - 1730	5	Design Considerations for Rural Roads Dr Gurmel Ghataora, University of Birmingham
1900- 2100		Module Dinner

Additional activities:
Module Dinner

Speakers



Dr Michael Burrow is a senior lecturer in the School of Civil Engineering. He leads the UoB's world renowned team of road specialists which developed a suite of cutting edge road asset management decision support tools the products of which are used world-wide and is a Deputy Director of Education in the School of Engineering (Civil Engineering). His research focus is associated with pro-poor sustainable infrastructure asset design and management and he is currently actively involved in research projects worth approximately £10 million. Amongst these he currently leads three large road management research projects; one funded by the Ethiopian Roads Authority is associated with improving the sustainability of Ethiopia's national roads; the second is a DFID funded project through RECAP which is improving rural road asset management in Sub-Saharan Africa. The third project, funded by the TSB, concerns the development of automated means of assessing at traffic speeds local road condition. Dr Burrow publishes his research widely and has more than 80 peer reviewed publications in the area of infrastructure design and management. Dr Burrow's teaching focus mirrors his research and his specialisation is that of road asset management. Dr Burrow has worked with partners from over 23 countries worldwide and his links with industry internationally. He has a number of external appointments including acting as the Chairman of Highway Management Services Ltd (HMS), which provides highway maintenance management software and consultancy to road agencies worldwide.

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Mr John Hine has over 40 years' experience of working on transport problems of developing countries specialising in the fields of rural and national transport planning, road appraisal and freight transport. He has worked in 27 African and Asian countries and is an author of over 50 papers and research reports. He has been an external examiner and supervisor of 10 PhD and MPhil candidates. Over the last two years John has been working as an independent consultant. He has just completed a report for the SSATP/World Bank on the planning and prioritisation of rural transport infrastructure and services. John worked for four years (2005-2009) with the World Bank working as the Thematic Group Leader for Rural Transport in the Transport Anchor Unit. He also spent 29 years with the Transport Research Laboratory, TRL, undertaking a wide range of research and consultancy assignments, with long term postings in Ghana, Pakistan and Indonesia. In addition he has also worked as a Transport Economist for the Ethiopian Roads Authority (2002-2005) and with the Ministry of Transport in Tanzania (2009-2012).



Dr Gurmel S Ghataora is a senior lecturer in the School of Civil Engineering at the University of Birmingham. Prior to commencing his work at the University in 1990 he worked with both a ground investigation contractor and Arup. Dr Ghataora has over 42 years of experience in civil engineering.

In addition to Dr Ghataora's teaching duties, which are mainly in the areas of Soil Mechanics and Geotechnical Engineering at both undergraduate and masters level, he is Head of Postgraduate Admissions for all the taught programmes in the School of Civil Engineering. He also supervises PhD students. His areas of interests include, soil erosion, ground improvement, use of marginal

materials for roads and railways, and utilization secondary materials in concrete.

Dr Ghataora has been a principal investigator and co-investigator on both UK and overseas projects, funded by government organisations and industry, worth over £1.8 million.

Dr Ghataora's indepth profile is located at <http://www.birmingham.ac.uk/schools/civil-engineering/people/profile.aspx?ReferenceId=6400>

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Day 2 (September 11):**Design**

	Session	
0855–0900	1	Introduction to Day 2 Dr Michael Burrow, University of Birmingham
0900-1030	2	Fundamental Soil Mechanics Dr Gurmel Ghataora, University of Birmingham
1030-1100		Break: Tea/Coffee
1100 -1230	3	Fundamental Geotechnical Engineering Dr Gurmel Ghataora, University of Birmingham
1230-1300	4	Site Investigation Dr Gurmel Ghataora, University of Birmingham
1300-1400		Lunch
1400-1530	5	Environmentally Optimised Design of Rural Roads Mr Mike Pinard
1530-1600		Break: Tea/Coffee
1600 -1730	6	Measures for Preserving Investments in Rural Roads Mr Mike Pinard

Additional activities:
Module Photograph

Speakers



Mr Mike Pinard is a chartered civil engineer with more than 40 years of post-graduate experience in various regions of the world including the Far East, Middle East, North Africa, Central America and, most recently, Africa. His work experience has covered various aspects of highways including planning, design, construction, maintenance, research, management, road sector reform, road management systems, overload control and road user charging. In the past 25 years he has worked extensively in the Southern African region for various international organizations including the World Bank, African Development Bank, USAID, UNECA and JICA. He has also been a member of the Southern African Transport and Communication Commission Group of Experts on Road Infrastructure and was involved in the development of the SADC Protocol on Transport, Communications and Meteorology. He is the author of the SSATP publications on “Progress on Commercialized Road Management in Sub-Saharan Africa” and “Road Management Policy: An Approach to the Evaluation of Road Agency Performance”. He holds a BSc (Hons) degree in Civil Engineering and an MSc in Highway Engineering. He is a Fellow of the UK Institution of Civil Engineers and a former past president of the Botswana Institution of Civil Engineers.

**Day 3 (September 12):
Management**

	Session	
0855–0900	1	Introduction to Day 3 Dr Michael Burrow
0900 - 1030	2	Rural Road Management in India: Significant Experiences 1 Dr Ashok Kumar, The World Bank
1030 -1100		Tea/Coffee
1100 - 1230	3	Rural Road Management in India: Significant Experiences 2 Dr Ashok Kumar, The World Bank
1230 – 1330		Lunch
1330 - 1500	4	TBC Mrs Alka Upadhyay, Joint Secretary, Ministry of Rural Development, Government of India
1530 – 1700	5	TBC Mrs Alka Upadhyay, Joint Secretary, Ministry of Rural Development, Government of India

Speakers



Dr Ashok Kumar is working as senior highway engineer at the World Bank office, India. He has 35 years of professional experience in rural roads and M.Sc and Ph.D from the University of Birmingham. His professional experience includes (i) international assignments in countries including Afghanistan, China, Mongolia, Indonesia, Nepal, Philippines, and Sri Lanka; and (ii) preparation and supervision of road projects covering about 25,000km roads. His experience also include asset management and maintenance, development of road sector policies, modernization of road agencies, road sector reforms, capacity building and knowledge sharing, contract management, and working on challenging assignments in low capacity regions. During his research carrier of 22 years at the Central Road Research Institute, India he has successfully completed a number of research projects in the area of rural roads. As part of his Ph. D program and research work, he has developed a computerized model to generate "optimized rural road network plans" The model is widely used to develop core network plans for rural roads in India to focus investments on priority links and achieve greater transparency in resource allocation.

Day 4 (September 13):**Sustainable Rural Road Maintenance Management**

	Session	
0855–0900	1	Introduction to Day 4 Dr Michael Burrow
0900 -1030	2	Rural Road Asset Management Practices Dr Michael Burrow
1030-1100		Break: Tea/Coffee
1100 -1230	3	Developing Sustainable Low Volume Rural Road Management: Principles Rob Petts, Intech Associates
1230-1330		Lunch
1330-1500	4	Developing Sustainable Low Volume Rural Road Management: Practice Including Intermediate Technology Approaches Rob Petts, Intech Associates
1500-1530		Break: Tea/Coffee
1530-1700	5	Recent Developments in the uptake of Intermediate Technology Rob Petts, Intech Associates

Speakers



Mr Robert Petts started his career as a mechanical engineering trainee and then graduated as a civil engineer. He qualified as a Chartered Civil, Highways and Agricultural Engineer and has over 40 years of experience of running civil engineering projects in over 30 countries in the African, Asian, Middle Eastern, Pacific and European regions. He specialises in the management and maintenance of roads including the development of technologies; encompassing paving, equipment, intermediate and local resource based methods, institutional development, technical and economic feasibility, management systems, private sector development and training. He has served as a member of a number of bodies including, the World Road Association (PIARC) Committees (C3, C20 and TC2.5: Committee Secretary) on Rural Roads & Accessibility, the Appropriate Development Panel and The International Development Policy and Practice Panel of the UK Institution of Civil Engineers, Rural Transport adviser for the Global Transport Knowledge Partnership (IRF), and is an Officer of the Gold Medal of Sahametrei (Cambodia Government Adviser). He is an Honorary Senior Research Fellow for the University of Birmingham.

Day 5 (September 14):**Recent Developments in Rural Roads**

	Session	
0855–0900	1	Introduction to Day 5 Dr Michael Burrow
0900-1030	2	Rural Roads for Development: A socio-economic ex-post impact study from Cambodia and Laos Dr Reiner Koblo; KfW
1030-1100		Break: Tea/Coffee
1100-1230	3	Rural Roads for Development: Case studies from around the world Dr Reiner Koblo; KfW
1230-1330		Lunch
1330 -1500	4	University of Birmingham Research Dr Michael Burrow, University of Birmingham Dr Gurmel Ghataora, University of Birmingham
1500 - 1530	5	Presentation of certificates & close Break: Tea/Coffee

Speakers



Dr Reiner Koblo is Senior Project Manager at KfW Development Bank, Frankfurt. He has a 20 years working experience as transport planner and transport economist. Since about 10 years he is working in the field of development cooperation. This encompasses 2 years of technical cooperation at GIZ, Germany, and eight years of financial cooperation at KfW Development Bank. He worked in Asia, Africa, Southeast Europe and Central America. At KfW he was about 6 years as transport sector economist responsible for the implementation of development policy objectives in transport projects of the bank, updating of methodologies and ex-post evaluations of development cooperation projects. Since 7 years he is also senior project manager of rural roads projects in Cambodia.

PROVISIONAL