

Editorial

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The research in transportation studies as well as in all the engineering branches is meant to give answer to the needs of the social environment's balanced development.

As such the specific quality of this discipline is characterized by the frantic run-up to the problems caused by a dynamics of the sector, as fast as the processes of technological innovation, on the one hand and by the increase of the admittance to mobility on the other so that it sometimes seems to be unconfirmed.

Moreover the very nature of the problems demands a solution by the optimum rate of the complex systems, for which the single researcher's skills must join the other disciplines' ones, both in the planning phase of the works and in the realization ones, and obviously, during the management.

In recent years other difficulties have added to the above mentioned ones as the researchers have understood that the mere transport exercise and the transfer of people and goods was no more sufficient to guarantee a high performance. They are more strictly linked to the methodologies of the scientific research. The very present themes the scientific community has been confronting with by means of the highest cultural validity debates have been demanding indeed a critical analysis of the previously acquainted certainties. Besides these certainties had often matured in strictly specialistic and monothematic surroundings that had too often betrayed only one interpretation of the problems. This approach is the result of a very ambitious and complex intellectual process that had been consolidating in the analytical methods and techniques.

The scientific studies of the phenomena related to the exercise of the transport systems have often assumed aprioristic ideas and the researchers have not always been in condition to make use of the experimental check that is the main instrument in every fields of science. But now the scenery is rapidly changing thanks to the contribution given by the modern technologies.

The monitoring processes, the exact measurements of the dynamic inquiries related to the road system, the management and data processing hardware and software, the intelligent systems for the mobility's administration, the models of micro-simulation and interactive simulation in virtual

reality as well as all the technologies of recent generation which aim at the control and the maintenance, also structural, of the road system – an anything but negligible activity that has an impact even on facts of social importance such as the reliability of the transportation service – all this demands to take into consideration a very difficult picture but at the same time it allows the researchers to face on a scientific level challenges as promising as than ever. However we are expected to confront other arising difficulties as the competences involved in the transportation system research are so wide and specialized that it is difficult to follow their development. Moreover the adoption of a common language, that is the essential tool of getting the best contribution from each researcher's experiences, is the same difficult.

Here are the causes that have suggested the publication of this journal. There are several publishing channels, someone very prestigious, too, that can accept for publication the results of our work as researchers. Anyway the more qualified they are, the more cryptic they become as they are inclined to a specialist hermetism that is in contrast to the interdisciplinary approach that the scientific speculation of our field of study requires us. So we thought it would be fitting to promote a new editorial enterprise, whose this journal is the result we have got by pursuing the aim of offering either the occasion of a debate or a common place where disciplines, that seldom confer with each other, can collect knowledges and can confront themselves. The interdisciplinary is, therefore, the main and strategic key by which the researchers are able to develop and to enter the methodologies and the tools that are more suitable to interpret the phenomena we are interested in. With regard to this the most important international research enterprises have indeed a privileged plan in all the industrialized countries.

The safety in transportation system's usage is the subject matter that binds the different contributions published by the journal. It focuses both on the planning of new works and on the functional recovery of an important patrimony that was realized in order to fulfil needs that were different from the present ones.

Pointing out this theme is a necessary step to do in order to be able to intervene with new approaches and techniques in a scenery where the transport systems' usage has been deeply changing with regard to the best and advanced performances offered by the modern fleet of cars, the new and different use of the infrastructure reflecting the deep changes of the society and the increased traffic density, that overcomes the theories of the isolated vehicle.

To that end, some disciplines such as psychology and sociology are involved in the discussion as they define the models of behaviour hold during the guidance. Other disciplines are involved, too, as they allows us to obtain the best results in the measurement techniques, statistic data management and all that the civil engineering needs to get a synthesis of the analytical processes.

With regard to them the safety theme requires the implication of different specialistic competences, too, such as the ones concerning the works planning, the property check of the project, the maintenance and the efficiency of the infrastructure, the realization of the passive safety protections, the road traffic management and so on. In order to arrange such different themes, the editorial project has divided the journal in two sections: the first aims to publish papers covering all the many aspects of the subject that can be of cross-general interest for each

discipline, the second one is more specialist and it will deal with the results of studies and researches that are being led in the surroundings of each disciplines.

Anyway, the success of this journal will not depend on its formal structure, whatever it is, but on the quality of the contributions it will accept for publication.

We all were beware of this when we began to discuss about it.

At last but not at least I would like to thank the Associate Editors, the Members of the Editorial Board and the Members of the Panel of Referee. They are internationally known researchers, professors at prestigious universities and institutes all over the world and experts with relevant professional skills.

I would like to introduce finally the Associate Editors.

R. Wade Allen, from the USA, is President & Technical Director Systems Technology, Inc.. STI has been involved in research and consulting in vehicle dynamics, manual and automatic controls, and human factors of aerospace and ground vehicles for over 40 years. He is past Chairman of the Committee on Simulation and Measurement of Driver and Vehicle Performance of the Transportation Research Board, he is member of other Scientific Committees involved with transportation and he is the author of technical and scientific papers especially about advanced technologies applied to dynamics systems, such as simulation, modelling, visualization.

Janusz W. Blaszczyk, from Poland, is Professor of Biomechanics at Academy of Physical Education in Katowice, and also Director of Biomechanics Laboratory, Associate Professor of Neurophysiology at the Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw Poland. He is by training an electronic engineer and accomplished neurophysiologist. He is expert in fall related injuries in the elderly people. He is author of almost 100 publications in the area of neurophysiology, biomechanics and kinesiology. He has relevant international experience.

Zhongyin Guo, from China, is Professor of Highway Engineering, and he is Head of Transportation Engineering School of Tongji University, Shanghai. He is invited as Road Safety expert by the World bank and local governments. The group led by Professor Guo has carried out evaluation and review of the implementation of Road Safety Programs of relevant importance. In pavement engineering field, Professor Guo has been doing research and teaching since 1985. He is now the associate editor of "The International Journal of Road Materials and Pavement Design". He is author of numerous papers in the field of Road Safety management and Pavement engineering.

Yuri Shkitsky, from Russia, is Professor of the Moscow Automobile and Road Construction Institute (State Technical University) - MADI (GTU). He is also the Deputy Director of Institute of Improvement of Professional Skills and Retraining of the Staff of a Transport-Road complex (IPK MADI - GTU) and the Dean of the Faculty of Raising the Level of Professional Skills of the Technical Universities Teachers. He has a rank "Fellow C. Eng." (FICE) and he is member of the International Institute of Civil Engineers (The Institution of Civil Engineers) in London.