

## PREFACE

The present special issue of the Magnetohydrodynamics Journal is a selection of lectures and posters presented at the Joint 15<sup>th</sup> Riga and 6<sup>th</sup> PAMIR International Conference on Fundamental and Applied MHD held in Rīga–Jūrmala (Latvia) during June 27 – July 1, 2005. The conference was attended by more than 230 scientists and engineers from universities, research institutions and industries. About 210 communications were presented in oral or poster form, revealing the vitality of the MHD community and the important position of the Riga/PAMIR conference.

The conference was in the well-established tradition of the previous Rīga and PAMIR conferences. Bringing together these two chains of conferences is intended to strengthen and focus the MHD activities even further. Additional partners for the organization of the conference came from Dresden (Germany), Reims (France) and Beer–Sheva (Israel), thus manifesting the long-term cooperation between the involved Latvian, French, German and Israel teams. The conference site in Latvia was particularly chosen due to the long-term, essential contributions of the Institute of Physics, University of Latvia, to the field of MHD. A recent highlight of MHD research in Rīga in 1999 was the first successful demonstration of a homogeneous laboratory dynamo.

Another important reason to organize this conference in Latvia was connected with the development of the Ampere Institute project that is planned to result in a new MHD institute for fundamental and applied research in Rīga. Latvia and France are at the origin of this project that has clearly the objective to become a European structure. The initiative to create such a new institution on the European level fits ideally to modern scientific requests and to the attractive possibilities connected with the extension of the European community.

In addition, the conference was hosting the first meeting of the new European COST action P17 "Electromagnetic Processing of Materials" that involves 12 European countries. The first Management Committee meeting of this action took place during the conference.

The organisers look forward to the next conference that will take place in the summer of 2008.

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