

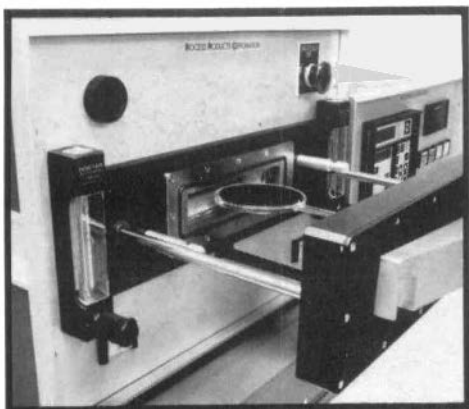
Meeting the needs of SUPERCONDUCTORS

Process Products Corporation is sensitive to the evolving needs of superconductives. Superconductives are setting the course of technology. They bring with them a new generation of electronics and supercomputers capable of functions unconceivable just a short time ago. But, before this can happen they need to be developed. Through benchmark testing of ceramics, metals and thin films, researchers can better understand which parameters are more critical than others. That is why we designed the 2016 M2F, a rapid thermal processor that is an affordable and important tool for the research and development of this emerging technology.

The 2016 M2F is capable of processing various substrates. It has a quartz chamber and tungsten halogen lamp or low thermal mass resistive heating, ambient to 1200°C. Its full microprocessor controls include temperature ramping rates up to 300°C/min., heat up and cool down. Capabilities include; chamber overpressure for rapid oxidation, high pressure oxidation, low pressure metal annealing, LP CVD and doping of thin films. It is cost effective for multi-layer processing and is quicker than larger systems.

Compact size allows for use on the laboratory bench and can be configured several ways. Some of its features include: • Microprocessor control • All quartz - 316 s.s. • 1×10^{-6} • Automatic mass flow control • Overpressure to 10 ATMS • Round or rectangular • Horizontal or vertical • Single and multiple substrate capacity • In situ - monitoring • Vacuum pressure - Flow - temperature • Closed loop control • Variable ramps and dwells • Redundant safety, excess temperature protection system • water flow interlock cooling system ensure maximum safety.

For more information regarding the 2016 M2F features and capabilities and how it can meet your process requirements contact:
Process Products Corporation 617-689-3828
FAX Number 617-686-5847.



PROCESS PRODUCTS CORPORATION

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Please visit booth no. 213
at the MRS Show in Reno, April 5-7, 1988.

European Correspondents Network Established

The Materials Research Society initially nucleated in the United States, but its influence has rapidly become international. The European Materials Research Society (E-MRS) gradually evolved through the 1980s, its annual 1987 conference in Strasbourg attracting more than 700 participants. The further international influence of MRS is now evidenced by the first meeting in Japan later this year (the International Meeting on Advanced Materials, May 30-June 3), and the upcoming conference in China in 1990.

An important step toward becoming a truly international society, is the involvement of members from many countries. Last year in Europe, a nucleus of BULLETIN correspondents was formed, and the first meeting of the European Correspondents Network (ECN) was held on November 4, 1987 in Strasbourg. The purpose of the ECN is initially to promote the diffusion of information on materials research activities in Europe. The correspondents will collect and transfer to the MRS BULLETIN relevant information from their own countries. Topics to be covered include:

- European and national research programs as well as important decisions relative to planning, organization, stimulation, and sponsoring of materials research.
- Organizations, institutions, and laboratories devoted to materials research—their activity, achievements, and new developments.
- Announcements and programs of conferences, exhibitions, meetings, workshops, etc., as well as reviews, reports, and news.
- Significant scientific breakthroughs and important technological developments (e.g., high temperature superconductivity, scanning tunneling microscopy, new fundamental particles, and more).
- Issues relevant to the mechanisms of fast and fruitful transfer of information to industry.
- Professional education in the science and engineering of materials.

The present group is small and not yet representative of the community. During 1988 we intend to increase its size so that each country in Europe is adequately represented. Below are listed the names of the national representatives who attended the first meeting.

France: A. Golanski, CNET, Grenoble

Ireland: G. Crean, University of Cork; A. Moore, Trinity College, Dublin

Italy: L. Zanotti, MASPEC-CNR, Parma

Switzerland: P. Oelhafen, University of Basel

United Kingdom: I.W. Boyd, University College London

West Germany: I. Eisele, Universität der Bundeswehr, Munich

Plans are that each country will eventually have two or three representatives. Nominations for additional representatives, together with a short curriculum vitae, can be sent to a relevant board member and the Associate Editor-Europe. Further information about ECN members will appear in upcoming issues of the MRS BULLETIN.

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Superconductivity Funding in the United Kingdom Shows Shortfall

While funding for new superconductivity initiatives in Japan has reached \$50 million, so far in the United Kingdom only \$3.5 million has been committed in the form of grants to be awarded by October 1988 by the Science and Engineering Research Council (SERC). A further \$9 million is to be invested over six years in a new University Research Centre (URC) in Superconductivity at the University of Cambridge.

In the recent call for proposals by the SERC, however, more than \$25 million was requested through research proposals. Only about \$1.2 million was actually awarded, leaving 43 of the 54 proposals totally unfunded.

Coupled with this dramatic shortfall in funding for superconductivity research are problems with resources for research in other areas. The funding for these proposals seems to have come from the central budget of the Science and Engineering Boards of the SERC, leaving concern that other areas of condensed matter research will lose out.

I.W.B.