

## OAK RIDGE NATIONAL LABORATORY

DE90 009395

OPERATED BY MARTIN MARIETTA ENERGY SYSTEMS, INC.  
POST OFFICE BOX 2008, OAK RIDGE, TENNESSEE 37831-6285

ORNL

## FOREIGN TRIP REPORT

ORNL/FTR-3597

DATE: April 9, 1990

SUBJECT: Report of Foreign Travel of C. J. McHargue, Senior Research Staff Member, Metals and Ceramics Division

TO: Alvin W. Trivelpiece

FROM: C. J. McHargue

PURPOSE: To continue collaborative research with A. Perez, G. Marest, and N. Moncoffre of the University Claude Bernard, Lyon I, Villeurbanne, France, and to attend a meeting of the organizing committee for a NATO-Advanced Study Institute.

SITES VISITED:

3/18-21/90	University Claude Bernard	Villeurbanne, France	A. Perez G. Marest N. Moncoffre
3/22-24/90	Il Ciocco	Castelvecchio Pascoli, Italy	B. Giannasi

ABSTRACT: The visit to the University Claude Bernard was to analyze data obtained there and at ORNL in a collaborative research program, to exchange samples, to plan further work, and to prepare drafts of two manuscripts for publication. The traveler also attended a meeting of the organizers of a NATO-ASI entitled "Diamond and Diamond-Like Films and Coatings" that will be held in Italy in July-August 1990. The purpose of this organizing meeting was to establish the program and other organizational details.

## DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

## **DISCLAIMER**

**This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.**

---

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**



Il Ciocco Conference Center, Castelvechio Pascoli, Italy,  
March 22-24, 1990

The visit to Castelvechio Pascoli was to meet with the organizing committee of the NATO-Advanced Study Institute "Diamond and Diamond-Like Films and Coatings," which will be held at the Hotel Il Ciocco during the period of July 22 to August 3, 1990. The final program for the Institute was set. The physical facilities were inspected and the needs of the Institute conveyed to the local management.

Summary

The collaboration with the groups at UCB continue to produce important results that are leading to an improved understanding of the structure and properties of implanted ceramics. The ion cluster deposition facility is under construction. The director of this new facility is receptive to having an ORNL visitor assigned there once it is finished. This facility will offer new opportunities to study non-linear ion-solid interactions and this offer should be seriously entertained.

## APPENDIX A

Itinerary

- 3/15-16/90 Travel from Farragut, TN, to Lyon, France
- 3/18-21/90 Drs. A. Perez, G. Marest, N. Moncoffre, University Claude Bernard, Lyon I, Villeurbanne, France, collaborative research on ion-implanted ceramics
- 3/21/90 Travel to Castelvechio Pascoli, Italy
- 3/22-24/90 Mr. B. Giannasi, organizational meeting for NATO-ASI
- 3/25/90 Travel from Italy to Farragut, TN

## APPENDIX B

Distribution

1. John J. Easton, Jr., Assistant Secretary for International Affairs and Energy Emergencies (IE-1), DOE, Washington, DC 20585
2. James F. Decker, Acting Director, Office of Energy Research (ER-1), DOE, Washington, DC 20585
3. Donald K. Stevens, Associate Director for Basic Energy Sciences, Office of Energy Research (ER-10), DOE, Washington, DC 20545
4. Iran L. Thomas, Director, Division of Materials Sciences, Office of Basic Energy Sciences, Office of Energy Research (ER-13), DOE, Washington, DC 20545
5. Robert J. Gottschall, Division of Materials Sciences, Office of Basic Energy Sciences, Office of Energy Research (ER-13), DOE, Washington, DC 20545
6. James A. Reafsnyder, Deputy Assistant Manager, Energy Research and Development, Oak Ridge Operations, DOE, Oak Ridge, TN 37831-8600
7. Donald J. Cook, Deputy Director, Safeguards and Security Division, Oak Ridge Operations, DOE, Oak Ridge, TN 37831-8571
- 8-9. DOE, Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831
10. B. R. Appleton
11. E. E. Bloom
12. L. L. Horton
13. M. B. Lewis
14. L. K. Mansur
15. C. J. McHargue
16. M. E. O'Hern
17. W. C. Oliver
18. P. S. Sklad
19. J. O. Stiegler
20. A. W. Trivelpiece
21. C. W. White
- 22-23. Laboratory Records Department
24. Laboratory Records Department-RC
25. Laboratory Protection Division
26. ORNL Patent Section
27. ORNL Public Relations Office
28. M&C Division Records Office