

The Max Planck Society

CONTACT

Felix Kahle
Max Planck Society

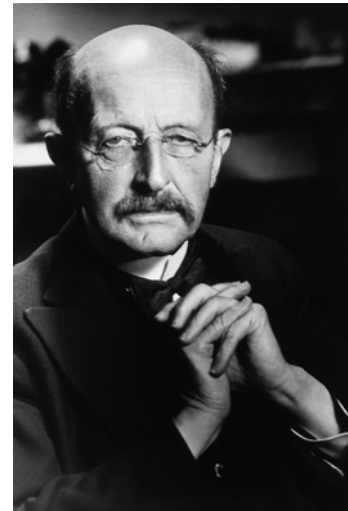
Division of International Relations
Hofgartenstrasse 8
80539 München
Tel: +49 89 2108 1229
Fax: +49 89 2108 1451
Email: Kahle@gv.mpg.de



Mission:

Research at the Frontiers of Knowledge

“Knowledge
must precede application.”
- Max Planck -



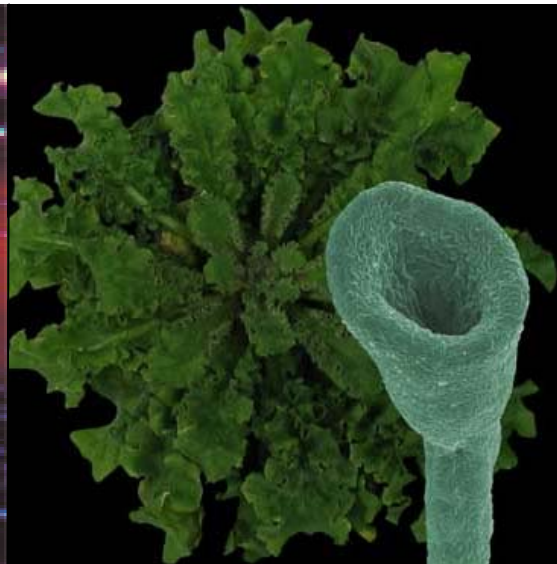
- Advancing innovative and interdisciplinary research at the frontiers of knowledge
- Providing competitive research conditions for excellent researchers
- Promoting young researchers and international cooperation



Scientific Sections



**Chemistry, Physics, and
Technology Section**



**Biology and Medicine
Section**

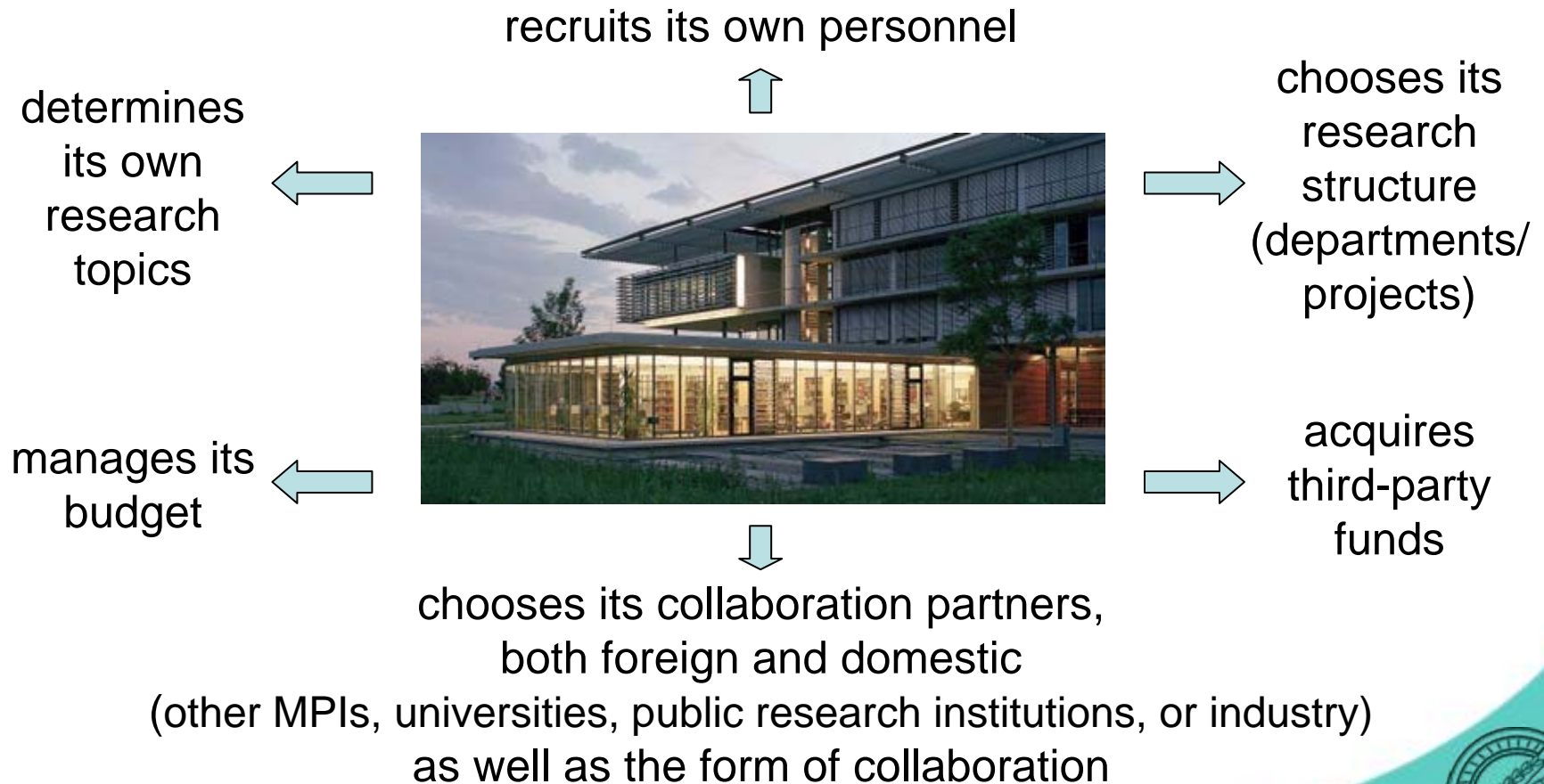


Humanities Section



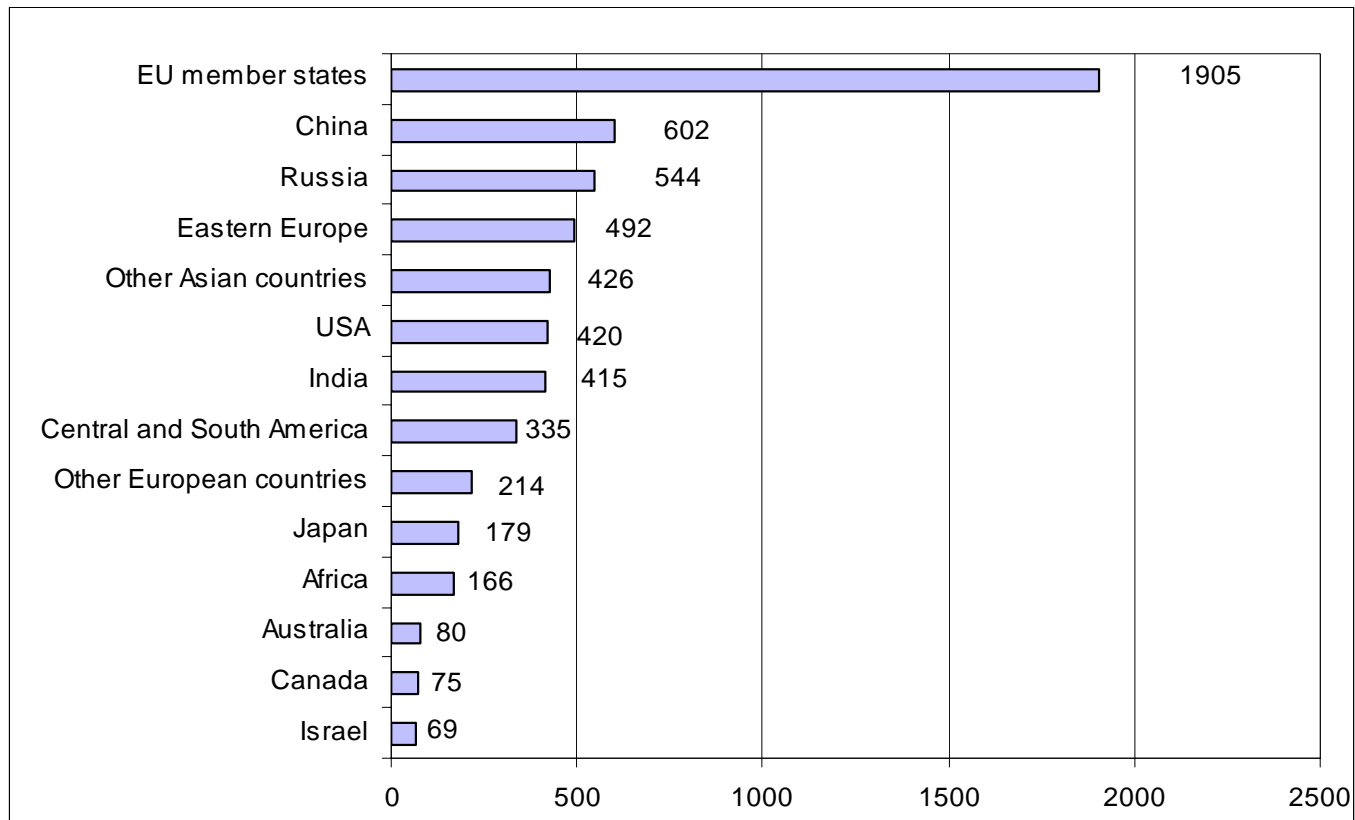
Pursuing our Goals: The Autonomy of Max Planck Institutes

Each Max Planck Institute / Scientific Director:



International Careers

Nationalities of foreign junior & visiting scientists at Max Planck Institutes in 2005



First Class Research Training

International Max Planck Research Schools (IMPRS).

- offer **PhD courses** with structured curricula and workshops,
- offer **PhD scholarships**,
- give access to excellent research and study possibilities, state-of-the-art equipment, facilities and locations, and
- provide an international environment.



International Max Planck Research Schools

IMPRS Facts and Figures

2006 (43 IMPRS) with a total of 1700 PhD, 250 BA Students

59 % foreigners from 85 countries:

- India	86
- EU 25	79
- Italy	77
- China	72
- Poland	47
- USA	30
- Russia	29

www.imprs.mpg.de



Max Planck Partner Groups

- Aim: Support cooperative research in innovative target areas and of mutual interest to MPI and to the designated partner institutions in India.
- Criteria: Postdoc, max 38 years with proven scientific qualification + minimum stay of 12 months at a MPI preceding candidates return to a high-performance and appropriately equipped laboratory in India.
- Candidates for Head of a Partner Group are nominated by the Directors of Max Planck Institutes.
- Partner Groups run for 3 + 2 years with mid-term review. Funding: up to 20,000 EUR p.a.
- Co-financing by DST in some cases.



Strategic instruments for promoting cooperation between Max Planck Institutes and partners in India



- 2007 10 Max Planck Partner Groups established
 - *of the MPI for Physics at Tata Institute of Fundamental Research, Mumbai*
 - *of the MPI for Computer Science at IIT Delhi*
 - *of the MPI for Solid State Research at S.N. Bose National Center for Basic Sciences, Kolkatta*
 - *of the Fritz Haber Institute at UGC-DAE Consortium for Scientific Research, Indore*
 - *of the MPI for Marine Microbiology at J. Nehru Center for Advanced Sciences, Bangalore*
 - *of the MPI for Chemical Ecology at the National Chemical Laboratory, Pune*
 - *of the MPI for Chemistry at IIT Delhi Roorkee*
 - *Of the MPI of Microstructure Physics at IIT Delhi*
 - *Of the Fritz Haber Institute at UGC-DAE Consortium for Scientific Research, Indore*
 - *Of the MPI for Nuclear Physics at TIFR, Mumbai*
 - *Of the MPI for Developmental Biology (location to be decided)*



Max Planck-India Fellowships

- Max Planck-India Fellowships are a distinction for highly qualified and talented scientists and are awarded to scientifically outstanding, promising young Indian scientists not older than 35 years. Candidates must hold a doctors degree and will receive a sum of 3,000 EURO p.a. for up to four years.
- Fellowship Holders have the right to visit at a Max Planck Institute (MPI) for up to two months a year. A minimum one month's visit per year is obligatory. Travel expenses for this purpose are covered from the fellowship.
- Aside from these requirements, the Fellowship Holder is free to decide on the use of funds within the given framework and for all purposes in connection with the ongoing cooperation with the MPI (e.g. visits to other German research institutions, participation in international workshops, financing travel of co-workers to the MPI etc.).



Strategic instruments for promoting cooperation between Max Planck Institutes and partners in India



October 2004: Signing of the Memorandum of Understanding with the Department of Science & Technology

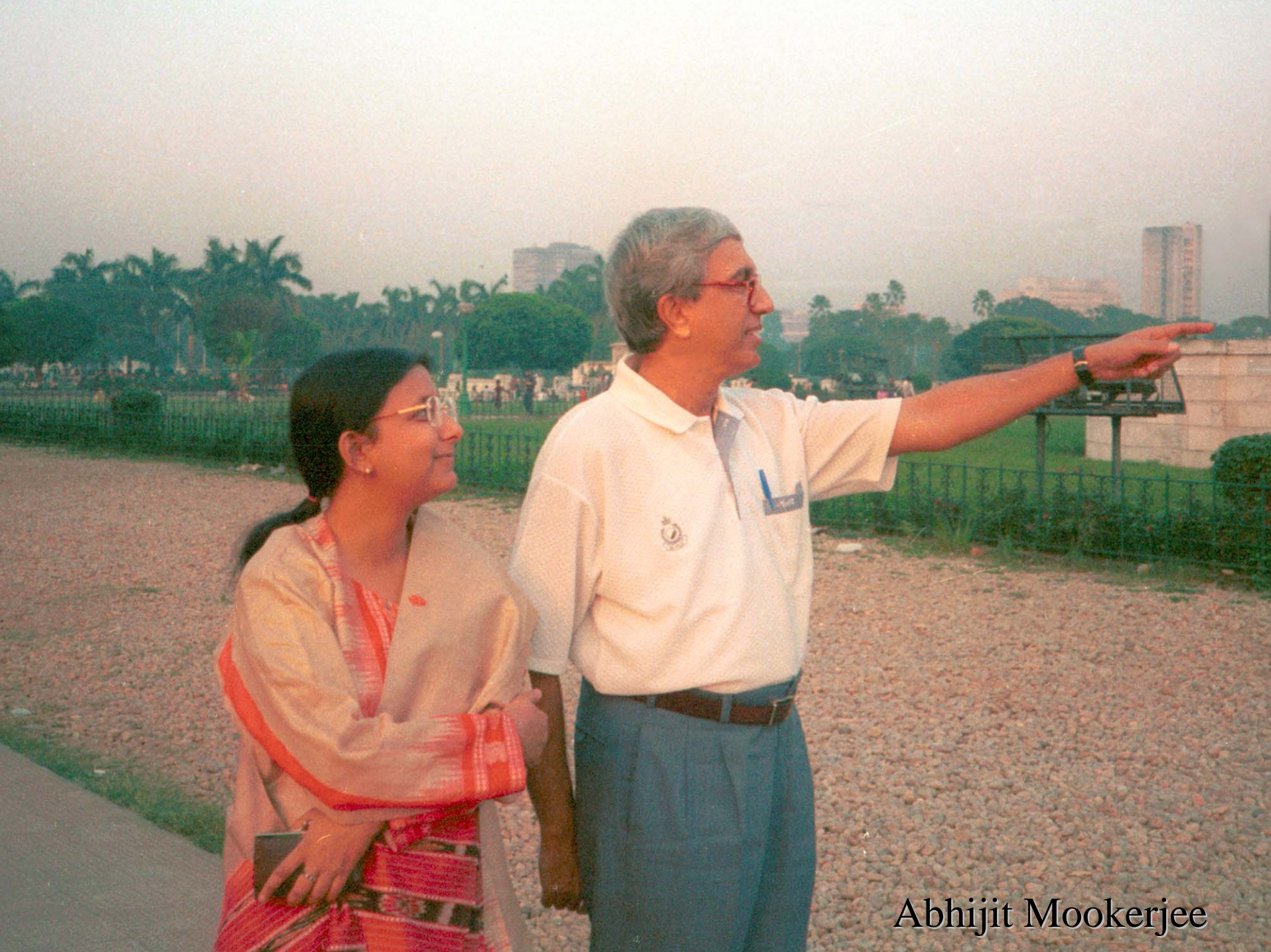


Strategic instruments for promoting cooperation between Max Planck Institutes and partners in India



- 2007: 2nd joint MPG-DST Call for Nominations for the establishment of up to 3 additional Max Planck Partner Groups and Max Planck-India Fellowships (co-financed by DST)
- “Start-Up Workshops” for young German and Indian scientists to be held 2007





Abhijit Mookerjee

D. D. Sarma, Indian Institute of Sciences, Bangalore

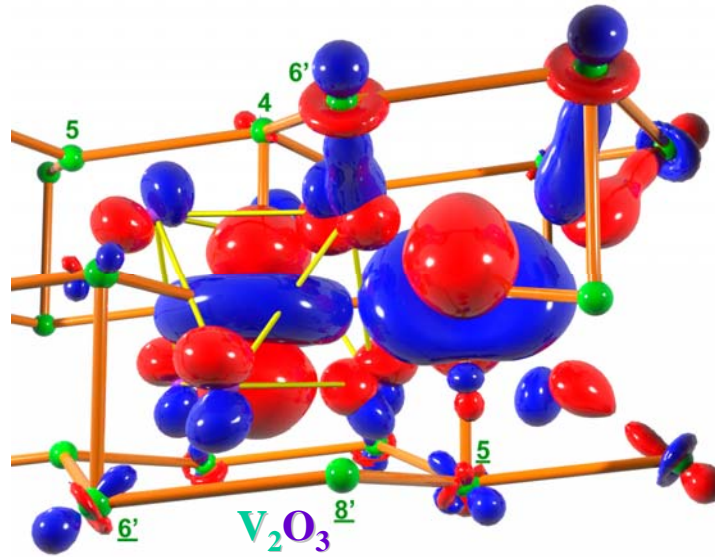
I. Dasgupta, Indian Institute of Technology, Mumbai

R. Valenti and H. O. Jeschke, Univ of Frankfurt

Associated members of the partner group:

Tanusri Saha
Dasgupta,

S.N. Bose National
Centre for Basic
Sciences, Kolkata,



Head of the Indian
Partner Group
of the Max Planck
Institut für
Festkörperforschung
Stuttgart.

$$U(\nu, T) = \frac{8\pi\nu^2}{c^3} \frac{h\nu}{\exp(h\nu/kT) \mp 1}$$

Unravelling chemical bonding and physical properties
of novel materials using Wannier functions