INTERNATIONAL

WINTERSCHOOL

ON

ELECTRONIC PROPERTIES OF POLYMERS AND RELATED COMPOUNDS

HAUS ALPENHOF

KIRCHBERG

TYROL

23.2–1.3.1985

AUSTRIA

IWEPP

PROGRAM

INTERNATIONAL WINTERSCHOOL

ON

ELECTRONIC PROPERTIES OF POLYMERS

AND RELATED COMPOUNDS

HAUS ALPENHOF
KIRCHBERG/TIROL
AUSTRIA

FEB. 23.- MAR. 1. 1985

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INTERNATIONAL WINTERSCHOOL ON ELECTRONIC PROPERTIES OF POLYMERS AND RELATED COMPOUNDS

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SCOPE

THIS WINTERSCHOOL IS CONCERNED WITH PHYSICS AND CHEMISTRY OF POLYMERS. PARTICULAR ATTENTION IS PAID TO UNCONVENTIONAL PROPERTIES LIKE CONDUCTION, OPTICAL PROPERTIES, LATTICE DYNAMICS, DIELECTRICAL PROPERTIES, MAGNETIC PROPERTIES, ELECTROCHEMICAL PROPERTIES, MODEL COMPOUNDS, STRUCTURE, PREPARATION ETC. THEORETICAL AS WELL AS EXPERIMENTAL PROBLEMS ARE PRESENTED AND ATTENTION IS BE PAID TO APPLICATION POTENTIALITIES AND PROMISING NEW DEVELOPMENTS.

THE LECTURES OF THE WINTERSCHOOL ARE OF BOTH TUTORIAL AND RESEARCH TYPE AND POSTER PRESENTATION IS POSSIBLE.

NOTES FOR PARTICIPANTS

Time and location

The IWEPP 1985 starts on Saturday, Feb.23, lunchtime at the Haus Alpenhof in Kirchberg/Tyrol, Austria and extends to Saturday Mar.2, breakfast. There will be a reception party on Feb.23, after dinner and a farewell party including dinner on Mar.1.

Transport

The Haus Alpenhof can be reached by private car according to the enclosed map. Participants arriving at the railway station in Kirchberg or Kitzbühel should hire a taxi to get to Haus Alpenhof.

Addresses

The address of the Winterschool is:
Haus Alpenhof II/309
A-6365 Kirchberg/Tyrol, Austria
Tel. 05357/2389

However, all questions concerning the IWEPP should be directed to
Prof.H.Kuzmany
Inst.f.Festkörperphysik, Univ.Wien
Strudlhofg.4
A-1090 Vienna, Austria

Tel. 222-342630-245
Telex 116222-physica

Participation

Participation at the IWEPP 1985 is possible for students and scientists working in the field covered by the scope of the meeting. However, because of the limited space the participation requires prearranged acceptance by the organizers.

Contribution

All oral contributions will be presented in the seminar room of the Haus Alpenhof. Participants are invited to contribute comments, particularly to research lectures where 10 minutes for discussion are reserved at each lecture. Overhead projection and slide projection (5x5 cm^2) will be possible. Poster will be presented in the downstairs hobby room of the house. The poster size is 150 (width) x 100 (height) cm^2.

Fees

The fee for the IWEPP 1985 is öS 3.800,- which covers full board and lodging at the Haus Alpenhof, a conference fee and the proceedings. Support can be given to contributors and students.

Proceedings

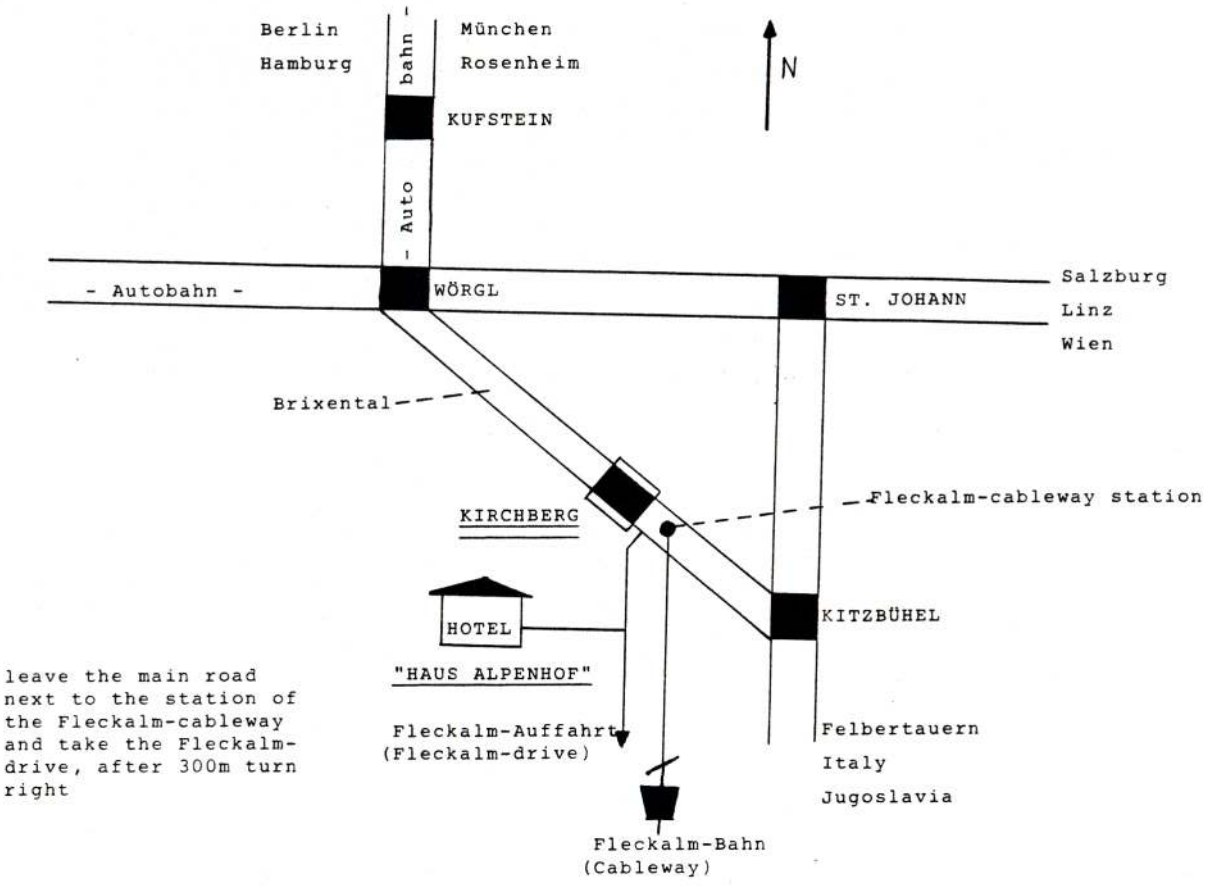
The contributions to the IWEPP 1985 will be published in the "Springer Series of Solid State Sciences". The expected date of appearance of the proceedings is June 1985.

Manuscripts

Special paper for camerarady manuscripts will be distributed in Kirchberg. The manuscripts should be mailed to

Dr.S.Roth
Max-Planck-Institut für Festkörperforschung
Heisenbergstr.1
D-7000 Stuttgart, FRG

Manuscripts can only be published if they arrive in Stuttgart before March 18, 1985.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leave the main road next to the station of the Fleckalm-cableway and take the Fleckalm-drive, after 300m turn right
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INTERNATIONAL WINTERSCHOOL ON ELECTRONIC PROPERTIES OF POLYMERS AND RELATED COMPOUNDS, Program schedule

MORNING SESSION

			8.30/9.20	9.20/10.10		10.40/11.30		
IP Introduction Preparation	Sun 24.2.	8.00 - 8.30 breakfast	Conductive polymers ROTH	Application of electrical conducting polymers MÜNSTEDT	30 minutes break	Structural background of conductivity in polymers:.... WEGNER		12.00 - 13.00 lunch
RB Raman Biopolymers	Mon 25.2.		Raman spectroskopy of conjugated polymers BLOOR	The dispersion effect of resonance Raman lines in trans-PA KUZMANY		Collective effects in polypeptides and proteins CARERI		
TO Theory Optic	Tue 26.2.		Theoretical description of polyacetylene:... BAERISWYL	Polarons and bipolarons in doped aromatic polymers BRÉDAS		Intensity and frequency vibratinal spectroscopy of conducting polymers ZERBI		
MEP Magnetic resonance Electrochem. Photopolym.	Wen 27.2.		Magn. resonance of conjugated polymers MEHRING	Photopolymers for optical memory and waveguides LECHNER		10.40 Magn. resonance studies of cond. polymers BERNIER	11.10 ESR study of electrochemical doping in conduct. polym. NECHTSCHEIN	
RT Related Topics	Thu 28.2.		Charge density waves and electr. instabilities in $NbSe_3$ and similar comp. SEEGER	9.20/10.40 The physics of $TMTSF_2X$ conductors JEROME	break	11.10/12.00 Polymeric electrets SCHNEIDER		
STD Structure Transport Diacetylene	Fri 1.3.		Structural properties of of cond. polym with a special application to PA POUGET	9.20 In-situ studies on structural transf. in PA RIEKEL	9.50 Non solitonic transport model for PA EHINGER	10.50 El. struct. of react. intermediates in diacetylene cryst. SIXL	11.20 Electron motion on polydiacetyl chains WILSON	

INTERNATIONAL WINTERSCHOOL ON ELECTRONIC PROPERTIES OF POLYMERS AND RELATED COMPOUNDS, Program schedule

EVENING SESSION

	19.00	19.30	20.00	
	Recent development in precursor routs to PA FEAST	Electronic prop. of PA prep. by the Durham route FRIEND	Intrinsic anisotr. prop. of trans-PA KAHLERT	Sun
	Vibration. prop. of doped conj. polymers LEFRANT	Study of the PA propert. through RRS analysis MULAZZI	R. Raman scattering in polymers EHRENFREUND	P 1 Mon Poster 1
	Ab initio studies on the struture of simple organic polymers KARPFEN	Photomodulation of cond. polymers VARDENY	High resolution spectroskopy of PA oligomers:... KOHLER	DI 1 Tue Discussion: Is polyacetylene a special material or a typical conducting polymer?
	Electroch. and spectroelchem. studies of PP and PANI GENIESE	Problems rel. to polymer battery design BITTIHN	In situ IR spectroelch. invest. of p-thiophen NEUGEBAUER	DI 2 Wen Discussion: Application of polymers for conductors and batteries
	19.00/19.50 Silicon technology vs. molecular electronic RIEDELBERGER	19.50 Space charges, transport and breakdown in polym. dielectr PFLUGER		P 2 Thu Poster 2
	18.30 Invest of the el. struct. of cond. poly by EEL spectrosc FINK	19.00 Polyaniline $(\Phi N)_x$ SALANEK		Fri 20.00 dinner and farewell

18.00 - 19.00 dinner

private discussion and skiing