



9TH WORKSHOP ON RADIATION MONITORING FOR THE INTERNATIONAL SPACE STATION

WORKSHOP PROGRAMME - FINAL

SEPTEMBER 8-10, 2004

VIENNA UNIVERSITY OF TECHNOLOGY
ATOMIC INSTITUTE OF THE AUSTRIAN UNIVERSITIES

STADIONALLEE 2
1020 VIENNA, AUSTRIA

CHAIRMAN: GÜNTHER REITZ, DLR
CO-CHAIR: NORBERT VANA, ATI



September 8-10, 2004
Vienna University of Technology
Atomic Institute of the Austrian Universities



WORKSHOP PROGRAMME

WEDNESDAY, SEPTEMBER 8, 2004

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- 09:00 Opening addresses and guided tour through the Atomic Institute
 - 10:00 Coffee break
 - 10:30 Scientific session I "Calibration"
 - 12:30 Lunch
 - 14:00 Scientific session II "Models"
 - 15:30 Coffee break
 - 16:15 Scientific session III "Radiation monitoring"
 - 17:45 Adjourn

THURSDAY, SEPTEMBER 9, 2004

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- 09:00 Scientific session IV "Radiation monitoring"
 - 10:30 Coffee break
 - 11:15 Scientific session V "Radiation monitoring"
 - 12:45 Lunch (catering service)
 - 13:45 Scientific session VI "Radiation monitoring"
 - 15:15 Coffee break
 - 16:00 Scientific session VII "Radiation monitoring"
 - 17:45 Bus departure for guided sightseeing tour
 - 19:30 Workshop dinner at a Viennese Heurigen

FRIDAY, SEPTEMBER 10, 2004

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- 09:00 Scientific Session VIII "Future experiments"
 - 10:30 Coffee break
 - 11:15 Scientific session IX "Future experiments"
 - 12:45 Lunch
 - 13:45 Round table discussion
 - 15:15 Coffee break
 - 16:00 Round table discussion
 - 17:30 Closing ceremony



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SCIENTIFIC SESSION I “CALIBRATION”

1. Comparison of results from the ICCHIBAN -3 experiment and current status of the ICCHIBAN -5 experiment

Y. Uchihori, K. Fujitaka, H. Kitamura, N. Yasuda and E.R. Benton (on behalf of ICCHIBAN Working Group and participants)

2. Comparison of results from the ICCHIBAN -4 experiment and current status of the proton ICCHIBAN and ICCHIBAN -6 experiments

E.R. Benton, Y. Uchihori, N. Yasuda and J. Miller

3. TLD results from the recent ICCHIBAN experiments

P. Bilski and P. Olko

4. ICCHIBAN -4 & 6: NRPB results

L.G. Hager and D.T. Bartlett

5. Results obtained with DB-8 and LIULIN-ISS instruments during ICCHIBAN -5 session at the NIRS HIMAC

V.V.Benghin, V.M.Petrov, V.A.Shurshakov, V.I.Redko, I.V.Tchernykh, R.S.Bogdasarov, M.I.Panasyuk, Yu.V.Kutuzov, A.I.Myasnikov and Ts.Dachev

6. TEPC results from ICCHIBAN-5, Proton ICCHIBAN-1, and the KC135 flight environment characterization experiments

B.B.Gersey, E.R.Benton, Y.Uchihori, N.Yasuda, M.R.Shavers, J.Wedeking and J.Sodolak



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SCIENTIFIC SESSION II “MODELS”

- 1. Calculation of local doses with account for realistic ISS configuration**
Khamidullina N.M., Kuznetsov N.V., Pichkhadze K.M. and Zefirov I.V.

- 2. Precursor radiation activities for the ESA exploration programme**
P. Nieminen

- 3. The DESIRE project: Studies of the Columbus/ISS radiation environment using Geant4**

T. Ersmark, P. Carlson, E. Daly, C. Fuglesang, I. Gudowska, B. Lund-Jensen, R. Nartallo, P. Nieminen, M. Pearce, G. Santin and N. Sobolevsky

- 4. The status of FLUKA within the NASA space radiation shielding modeling consortium and its application to ISS and related ground-based measurements**

L. Pinsky



SCIENTIFIC SESSIONS III-VII “RADIATION MONITORING”

1. The average quality factors by TEPC for charged particles

K.Y. Myung-Hee, N. Hooshang and F.A. Cucinotta

2. The use of passive personal neutron dosemeters to determine the neutron component of cosmic radiation fields in spacecraft

D.T. Bartlett, L.G. Hager and R.J. Tanner

3. Radiation dosimetry for a microbial experiment in the space station using different track-etch and luminescent detectors

O. Goossens, F. Vanhavere, N. Leys, D. O'Sullivan, D. Zhou, F. Špurný, E.G. Yukihara, R. Gaza and S.W.S. McKeever

4. Results from recent ground based (HIMAC) and space (ISS) exposures using TL and OSL dosimeters

R. Gaza, O. Goossens, S.W.S. McKeever, E.G. Yukihara and F. Vanhavere

5. Intercomparison of passive radiation monitors in Russian segment of ISS (Space intercomparison / BRADOS)

N. Yasuda, Y. Uchihori, Y. Akatov, E.R. Benton, V. Shurshakov and K. Fujitaka



6. The BRADOS intercomparison ("Space ICCHIBAN") experiment onboard ISS – First results

M. Hajek and N. Vana

7. Secondary neutron and cosmic ray studies on the ISS using SSNTD stacks, BRADOZ-1 and 3 projects, 2001-2003

J. K. Pálfalvi, J. Szabó, B. Dudás, Y. Akatov, L. Sajó-Bohus and I. Eördögh

8. TL dose measurements on board the Russian segment of the ISS by "Pille" during expedition-7, -8 and -9

I. Apáthy, Y.A. Akatov, V.V. Arkhangelsky, S. Deme, A. Kaleri and I. Padalka

9. Radiation monitoring on board the Russian segment of the ISS. The comparison of the dose measurements by "Pille-ISS" and "R-16" service systems

Y.A. Akatov, V.V. Arkhangelsky and V.V. Tsetlin

10. Dosimetry for space radiation in ISS lifescience experiments using AUTO PADLES (temporary)

A. Nagamatsu

11. Dosimetry and microdosimetry onboard space vehicles and related topics: Results of Czech participants, 2002-2004

F. Spurný

12. Simultaneous investigation of galactic cosmic rays on aircrafts and on International Space Station

T. Dachev, F. Spurný, G. Reitz, B.T. Tomov, P.G. Dimitrov and Y.N. Matviichuk



13. The radiation monitoring system of the Russian segment of the ISS – Current status and results

V.M. Petrov, V.V. Benghin, V.A. Shurshakov, I.V. Chernykh, A.V. Markov, V.I. Lyagushin, A.N. Volkov, A.P. Aleksandrin, M.I. Panasyuk, M.V. Teltssov, Y.V. Kutuzov, O.V. Morozov and A. Myasnykov

14. ISS observations of the trapped proton anisotropic effect

T. Dachev, W. Atwell, E. Semones, B.T. Tomov and B. Reddell

15. Sileyeye-3/Alteino results on cosmic rays on board the ISS

M. Casolini (on behalf of the Sileyeye3/Alteino Collaboration)

16. Evaluation of neutron radiation environment inside the International Space Station based on the Bonner ball neutron detector experiment

H. Koshiishi, H. Matsumoto, A. Chishiki, T. Goka and T. Omodaka

17. The Matroshka facility – Dose determination during an EVA

T. Berger and G. Reitz

18. Calculations of measurement quantities in support of Matroshka

N. Zapp and G. Reitz

19. MATROSHKA-R experiment on board the ISS: Current status and preliminary results

V.A. Shurshakov, Yu.A. Akatov, V.M. Petrov, V.V. Arkhangelsky, S.V. Kireeva, E.N. Yarmanova, V.I. Lyagushin, I.S. Kartsev, V.I. Petrov and B.V. Polenov



SCIENTIFIC SESSIONS VIII-IX “FUTURE EXPERIMENTS”

1. Radiation Measurements and Shielding Analysis for ISS

M. Shavers

2. ALTEA: Calibration and status of the project

L. Narici

3. The high energy response of the electronic neutron/photon PTB dosimeter DOS-2002

M. Luszik-Bhadra, R. Nolte and M. Reginatto

4. Development of a diamond detector as a tissue equivalent semiconductor detector for space radiation

Y. Uchihori, T. Kashiwagi, K. Hibino, H. Kitamura, S. Okuno, T. Takashima, K. Yajima, M. Yokota and K. Yoshida

5. Energetic solar cosmic ray surveyor and monitor

P. Spillantini

6. The radiation assessment detector (RAD) for Mars

D.M. Hassler, A. Posner, M. Bullock, S. Rafkin, D. Grinspoon, R.F. Wimmer-Schweingruber, R. Beaujean, S. Burmeister, R. Muller-Mellin, S. Bottcher, G. Reitz, F. Cucinotta and T. Cleghorn



ROUND TABLE DISCUSSIONS

- ④ ISO standardization for space measurements
- ④ General discussion on the future direction of the ICCHIBAN programme
- ④ Data base for space radiation measurements
- ④ Recommendation/conclusions

DEMONSTRATION OF HTR METHOD

Laboratory demonstration of the High-temperature Ratio (HTR) Method: Date and time to be fixed during the meeting