

## Personal History

Family Name: Sajo Bohus  
Given Name: Laszlo  
Permanent Address: Caracas, El Hatillo Calle H, Quinta B, Venezuela  
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[bohus@ludens.elte.hu](mailto:bohus@ludens.elte.hu)

Date of Birth: 23 May 1947  
Place of Birth: Miskolc (Hungary)  
Nationality at Birth: Hungarian  
Present Nationality: Venezuelan Identification number: 2940749  
Marital Status: Married with Two children (Alexandra 27 and Andrew 24)  
Knowledge of Language:  
Speak, read and write easily: Italian, English, Spanish, Hungarian,  
speak with difficulty: French, Portuguese, German

Present Employment: Full Professor  
Senior Tenure at the Physics Department, Simon Bolivar University  
Education professional studies:  
1963-69 Technical Institute for Industry: "G. Feltrinelli" Milano (Italy)  
Degree: Trained Technician in Nuclear Energy, Perito Técnico in Energía Nuclear  
1969-1973 University of Milan (Italy)  
Degree: Doctor in Physical Sciences, Laurea di Dottore in Science Fisiche  
1973- 1975 University of Milan, Italy. Atomic and Nuclear Physics School  
Degree: Trained in Atomic and Nuclear Physics. Diploma di Specializzazione in fisica Atomica e Nucleare, (Equivalent to a Ph.D. degree).  
1982-1985 University of Birmingham, Birmingham (U.K.).  
Degree: Ph.D. in Physics (Applied Nuclear Science)

## Professional Work History

2002-2003 Head of the Nuclear Physics Section, Universidad Simon Bolivar  
1997- 2003 Head of the Nuclear Technology Management Unit, Universidad Simon Bolivar  
1996-1999 Coordinator of Analytical Nuclear Techniques, ARCAL IV, IAEA Vienna Austria  
1990-1994 Head of Physics Laboratories, Universidad Simón Bolívar. - Jefe del Laboratorio "D"  
1977-1981 Head of Nuclear Physics Section Universidad Simón Bolívar.  
1972-1973 Assistant of Physics Course. University of Milan, Italy  
1971-1972 Technician at Tekelec Airtronic. (Milan - Italia).  
Scholarships  
1970-1973 Italian Ministry of Education  
1982-1985 CONICIT - Venezuela  
Short term financial support from IAEA - Vienna-Austria;  
British Council in Caracas, 1998; to work on born neutron capture therapy  
MTA - Budapest, Domus Hungarica Scientiarum et Artium; 2001.  
ICTP-Trieste 2000; Program training in Italian Laboratories  
CNR and INFN of Italy 1999 to work on Explosive detection with nuclear technique  
IAEA Nuclear Data Section, Vienna, Austria 2001

## Academic Distinctions and Awards:

Senior Tenure at the Physics Dep. University Simon Bolivar  
Honorary Research Fellow of the University of Birmingham. 1986

Ordinary member of the Senior Common Room. University of Birmingham.  
 Life Member of the Birmingham University, U.K.  
 Vice-President of the Nuclear Society of Venezuela 1980.  
 Member of **PPI- 4-th** level of the program to promote researchers CONICIT/FONACIT since 1990 (nationally recognized researcher).  
 1991 **Special Distinction** from the University Francisco de Paula de Santander- Colombia  
 1992 **Award "Andrés Bello"** Universidad Simón Bolívar, Venezuela  
 1996 Member of the International Nuclear Track Society (INTS).  
 1998-2002 Member of the International Committee of the INTS  
 1996 Member of the Sociedad Venezolana de Fisica Medica 1996  
**First Class Award** of the 18-th July Order, Universidad Simon Bolivar.  
 Member of the Eotvos Physical Society – Budapest Hungary 1997  
 Member of the American Standard Testing Materials, 1996 USA  
**Award** of the Venezuelan National Commission of Merit, **Profesor Meritorio Nivel I** - 1998-2002

Projects managements:

1993-1996. CONICIT MPS-RPVII 260076 Environmental Radioactivity  
 1989-1992 IAEA - Ven/2/006 X-ray Lab.  
 1990-1992 IAEA - Ven/9/005 Gamma Spectrometry  
 1995-1997 IAEA - Ven/7/002 In Vivo Lead measurements  
 2002-2005 Prompt Gamma Neutron Activation  
 TC/INT/039 International Laboratory of Marine Radioactivity.  
 QAP XLVII (9709) Enviromental Measurement Laboratory US DOE- NY 1997  
 First International Intercomparision of Image Analyser Used for Evaluation of SSNTDs 1998, AEKI- Hungary  
 1999 Project Conicit/Conipet No. 97-003-854 Applied Nuclear techniques in Mineral resource exploration  
 Activation Analysis for Industrial production; IAEA - VEN/8/014  
 2002-2004 IAEA RC-12283 Prompt Gamma Neutron Activation Analysis for Provenance Study of Precolombian Pottery  
 2001-2005 Cosmic neutron dosimetry on board of International Space Station responsible for the Venezuelan group participation.

Scientific Publication evaluation 2003 from web page:

Publications	121	Last 10 years	62	
Referred	102		62	
Conference publications	41		23	
Article in book	4		2	
Citations	235		125	
Total citations	256		125	
Impact factor	16.4 for the most important articles			
Scientific Citations	43 for the 10 most important articles			

Scientific Publication: 1975-1999

E. Gadioli, E. Gadioli Erba, L.Sajo Bohus, and G. Tagliaferri. "An exciton model approach to the analysis of alpha-particle-induced nuclear reactions". Riv. N. Cim 6 (1976) 1-38

W.C. Parker, J.J. Pérez Alarcón and L.Sajo Bohus. Implementation of radioactive ions by means of direct current sputtering technique". Radiochem. And Radioanal. Lett.45 (1980) 1-12

W.C. Parker, J.J. Pérez Alarcón and L. Sajo Bohus  
"Single Stage Ion Accelerator For Ion Implantation Studies In The Region 0,5-60 KV". Radiochem. and Radioanal, Lett 45 (1980) 13-20.

L. Sajo Bohus, W.C. Parker, J.J. Pérez Alarcon and J.J. Labrecque. "A general purpose large volume gas flow proportional counter" Radiochem. and Radioanal. Lett. 45 (1980) 21-26.

J. Walter and L.Sajo Bohus "A versatil digital gamma radiation monitor"  
Inf. Nuclear Vol. 4 No 2 pp 1-6 (1987)

E. Greaves, H. Groening and L. Sajo Bohus Energy and linewidth in the induced emission of Mossbauer radiation Nuovo Cimento 3-Cond. Matt. A.T. 9 (10) 87, 1303-1312

L. Sajo Bohus and E. D. Greaves  
Low-beam-current profile monitoring and track formation in SSNTD CR-39 Nucl. Tracks Radiat. Meas. Vol.16 No 1 -15-22(1989). (Int. J. Radiat Appl. Instum part D).

L. Sajo Bohus and E.D. Greaves Design and application of an economic Surface barrier detector.  
Acta Cient. Ven. 42. 201-207 (1991) (Spanish)

E.D. Greaves y L. Sajo Bohus Optical spectroscopy of reflected light by *stegolepis grandis*.  
Acta Terramaris 3 13-17 (1991). (Spanish)

G. Bernasconi, E. D. Greaves and L. Sajo Bohus New approach in assesing the lower detection limit in low level radiation counting. Nucl. Inst. and Meth. in Phys. Res A307 (1991) 491-496

E.D. Greaves, L. Sajo Bohus, L.Marcó and M. Alvarez  
A compton peak method for incident angle determination in XRF with annular excitacion. X- ray spectroscopy. (1991) Vol 21, (1992) 127-131.

C.D. Cereceda, L.Sajo Bohus and E.D. Greaves **New method to measure the Schottky barrier potential** (Price Awarded Research) Nucl. Inst. Meth. in Phys. Res. B71 (1992) 484-488

N.Ojeda, E.D. Greaves, J. Alvarado, L. Sajo Bohus Determination Of V, Fe, Ni And S in petroleum crude oil by Total Reflection X-Ray Fluorescence Spectrochimica Acta 48 B 247-252, 1993

J. Broadway, K. Mc Croan, L. Sajo-Bohus, H. Ferrer. Geograph. a world wide geographycal display software system. Int'l Symp. Environmental contamination in central and eastern Europe-Budapest, H. 12-16 Oct. 1992. Proceedings, Budapest 92, pag 265-267.

R. Jaffé, F. Benitez, L.Sajo Bohus Assessment of eutrophication chronology via sediment core analysis: case of lake Valencia, Venezuela. Fresenius Envir. Bull. 2 : 602-607 (1993)

L. Marco, E.D., Greaves, J. L., Paz, L., Sajo Bohus Simultaneous determination of rare earths by x-ray fluorescence using a fundamental parameter method. X-Ray Spectrometry 22,362-367 (1993)

- L. Sajo Bohus, M.C. Scott, E.D. Greaves Fast neutron spectrometry gas proportional detector with lead cathode. *Revista de Física Aplicada e Instrumental*. Vol. 8, No 2, 47-55, 1993. (Spanish)
- J. Palfalvi, L. Sajo-Bohus and S.A. Durrani. Automatic track analysing in nuclear particle detection Austrian-Italian-Hungarian. *Radiation Protection Symposium Obergurl/Tyrol 28-30- Abril, 1993. Proceedings*. Vol.2, 271-275
- L.Sajo Bohus, E.D.Greaves, H. Ferrer, P. Dehollain, O. Guerra y J.A. Broadway. Quantitative Analysis of gamma emitter radionuclides in some products of the Venezuelan diet. *Rev. Fac. Agronomía*. 11:395-409, 1994 (spanish)
- S. Kochmann, Z. Vera de Molinas, G. de Souberlich, C. Buzarquis, J. Cabello, G. Coronel y L. Sajo Bohus Preliminary results of environmental radiation level in Paraguay. *Revista Universidad Nacional Asunción* 4, 32-38, 1994. (Spanish)
- Sajo Bohus L.; Marx G. and Toth E. Dynamic radon progeny in-door. *Rio Conference Follow-up-IUPAP Eger – Hungary Aug. 23-27, 1994; 155-160*. Published in "Atoms in our hands" Ed. Marx G. University Eotvos Hungary
- Sajo Bohus L. and Palfalvi J. Radon presence in domestic gas. *Fizika Szem.* 1 11-13 (1995).(Hungarian)
- Sajo Bohus L., Marx G. Horvath A, Kasztovskey Zs. and Toth, E. on the environmental radon concentration mapping. *Proceeding of the European Comm. Workshop on Environmental Pollution held in Budapest 28 Aug. 1994*. Ed. Orton and D. Vorsatz Eotvos University. 115-126
- Kondrashov V.S., Sajo Bohus L. and Greaves E.D. An Alternative approach to process gamma ray spectral data *Spectrochimica Acta* 49B,9, 941-945, 1994
- L. Sajo Bohus, Greaves E.D. and Marx G. Radioactive pollutant Measurements in Venezuela. *Proceeding of the European Comm. Workshop on Environmental Pollution held in Budapest 28 Aug. 1994*. Ed. Orton and D. Vorsatz Eotvos University. 206-212
- E.D. Greaves, J. Meitín, L. Sajo-Bohus, C. Castelli, J. Liendo and C. Borberg M. D3. Trace element determination in amniotic fluid by Total Reflection X-Ray Fluorescence. *Advances in X-Ray Chemical Analysis, Japan, Vol. 26s 47-52, (1995)*
- L. Sajo Bohus, J. Palfalvi, J. Molina and E.D. Greaves Radon concentration in Venezuelan gas for domestic supply. *Radiation Measurements* 25, 1-4, 1995
- L., Sajo Bohus, I. de Goncalvez, J. Facetti, R. Velázquez. Determinación del gradiente de radon en fuentes de agua en la región Centro Sur de Paraguay. *Rev. Univ. Nac. Asunción Paraguay*. 5-6. 63-66. 1996.
- I. Goncalvez, L. Sajo Bohus, E.D., Greaves., P. Martínez. Gamma radiation absorption technique for metal alloys density study *Act. Cient. Ven.* 47: 214-218, 1996. (Spanish)
- Toth, E., Deak, F., Gyukoza, Cs., Kasztovsky, Zs, Kuczi, R., Marx Gy, Nagy B., Oberstedt S., Sajo Bohus, L., Sukösd C, Toth C. Vajda N., Peculiar radon spot in Hungary. *J. Radioanalytic. Nucl. Chem. Lett* 213 (5) 317-330 1996
- Sajo Bohus, L., Birattari, Rozlosnik N, Gadioli E., Palfalvi, J., Greaves E.D. Identification of heavy ions and nuclear reaction fragments by means of latent tracks in passive detectors CR-39. *Acta Phys. Hung. Heavy Ion Physics*. 1996
- Sajo Bohus L., Greaves E.D., Palfalvi J., Merlo G. and Urbani F. First measurements of radon concentrations in Venezuelan caves *Bol. Soc. Venezolana Espel.* 29, 17-19, 1996

- Sajo Bohus L. Greaves E.D. Palfalvi J et al.  
Environmental gamma dosimetry and radon concentration determination in Venezuela *Proteccion Radiologica en America Latina y el Caribe* Vol 1,38-42, 1996 (spanish)
- Rozlosnik N. , Sajo Bohus L. and Marx G.A new method (AFM) to study latent and etched track formed in CR-39 passive dosimeters. *Proteccion Radiologica en America Latina y el Caribe* Vol 2, pag 998-1002, 1996
- Sajo Bohus L. Marx G. Horvath A. et al. In situ potencial risk dependence of environmental radon concentration mapping *Proteccion Radiologica en America Latina y el Caribe* Vol 1, pag 49-53, 1996
- Deak N., Horvath A., Sajo Bohus L. and Marx G. Radon Concentration Measurements in Therapeutic spring Water *Proteccion Radiologica en America Latina y el Caribe*, Vol 1, pag 43-48, 1996
- Sajo Bohus L., Greaves E.D., Merlo G., Urbani F. and Palfavli J. Radon Migration Study in Venezuela Cave with SSNT Detectors. *Radiation Measurements* 28: 725-729, 1977
- Sajo Bohus, L. Effects of Nuclear Explosions in Venezuela. *Atlantida*. (Rev USB). 37:82-86, 1997 (spanish)
- L. Sajo Bohus, J., Palfalvi, E.D. , Greaves. Response function determination for nuclear solid state detector type CR-39. *Act. Cient. Ven.* 48: 73-76, 1997
- Sajo Bohus, L., Greaves, E.D. , Scott M.C. Environmental Radioactivity concentrations in Auyan Tepuy, Venezuela. *Acta Terramaris* 10: 43-50,1997 (spanish)
- Toth, E., Deak, F., Gyukoeza, Cs., Kasztovsky, Zs, Kuczi, R., Marx Gy, Nagy B., Oberstedt S., Sajo Bohus, L., Sukösd C, Toth C.Vajda N., Radon variation in a Hungarian Village. *Environmental Geology* 31 (1-2) 123-127, 1997
- Liendo J., Sajo Bohus L., Palfalvi J., Greaves E.D. and N. Gomez Radon Monitoring for Health Studies in the Caracas Subway Using SSN Detectors. *Radiation Measurements*, 28: 729-732-1997
- Palfalvi J., Eordog I., Szasz K. and Sajo Bohus L. A New Generation Image Analyzer for Evaluation SSNT Detector. *Radiation Measurements* 28: 849-852, 1997
- Palfalvi J. and Sajo Bohus L. Use of SSNTDs in Neutron Beam Dosimetry *Rad. Measur.* 28: 483-488, 1997
- N. Rozlosznick, Sajo Bohus L. and Palfalvi J. Investigation of nuclear reaction products by AFM. *Radiation Measurements* Vol. 28, 277-280, 1997
- Kondrashov V.S., Sajo Bohus L. and Greaves E.D Approximation of spectrum alpha peaks by robust estimation. *Nucl. Instr. and Metho. in Phys. Res. A* 399,1, 140-146 1997
- Sajo Bohus L. Gomez J. et al. Gross alpha radioactivity of drinking water in Venezuela *J. Environ. Radioactivity* 35, 3 305-312, 1997
- Sajo Bohus L., Nemeth P. And Horvath A. Radon concentration measurements in hot spring waters in Venezuela. *Fiz. Szemle* 47 p 172-174, 1997 (Hungarian)
- Nemeth P., Castillo G., Gomez J., Sajo Bohus L. and Greaves E.D.  
Sintesis of EHID and Tc-99m labelling for medical diagnostic.  
*Rev. Espa. Med. Nuclear* 16, 5, 1997 (Spanish)
- Nemeth P., Ferreira S., Gomez J. Sajo Bohus L. and Greaves E.D. THF 1-hydroxi 2,2,2, -trifluoroethylidene-1-1-difosfonate: Syntesis and Tc-99m labelling of a new diphosphonate. *Hungarian Radiology Magyar Radiologia* 71 sup 1.1 1977

- Liendo J.A. et al. Sajo Bohus L.  
Heavy Ion Rutherford forward scattering for the elemental analysis of liquid amniotic sample. *APH -Heavy Ion Physics* 7. 335-431, 1998
- Geaves E.D., Alfonso Sosa J., Sajo Bohus L., Alvarez M., Wobruschek P ad Strelci C.  
Trace element determination of mercury by total reflection X-Ray Fluorescence.  
*Spectrochimica Acta* 52- 945-951, 1997
- Liendo J.A., et al. Sajo Bohus L.  
Preliminary results o the use of Rutherford Forward Scattering for the elemental analisis of liquid organic samples. *Nuc. Instr. and Meth. in Res. Phys. B* 140 409-414, 1998
- Rozlosnik, Sajo Bohus L., Birattari C., Gadioli E., Biro L.P. and Havancsak K.  
Direct observation of latente nuclear tracks in organic material by atomic force microscopy. *Nanotechnology* 8, 32-34, 1997
- Sajo Bohus L., Greaves E.D., Merlo G., Urbani F. and Palfavli J.  
Radon Migration Study in Venezuela Cave with SSNT Detectors.  
*Radiation Measurements* 28: 725-729, 1997
- D. Castro, D. Palacios, F. Urbani, P. Leon y L.Sajo-Bohus. Radon en agua potable del Litoral Central .  
*Saber.* 9 (1997)89 -95
- N. Rozlosnik, Cs. Glavak, J. Palfalvi, L. Sajo Bohus and C. Birattari . Investigation of nuclear reaction products by Atomic Force Microscopy. *Rad. Meas.*28 (1997) 177-280
- L. Sajo-Bohus, E. D. Greaves, A. Benites, L. Ramirez, W.J. Contrera, R. Ortega y J. Palfalvi. Niveles de radón en la red de estaciones de meteorología de la Fuerza Aérea Venezolana. *Atlantida. Anales de la Universidad Simón Bolívar* 36, 10-6 (1997)
- Urbani F., Flores N.,Sajo-Bohus L., Carreño R.  
Soil Gas Radon Concentration measurements in geological faults near Caracas, Venezuela  
*Bol. Soc. Venezolana de Geol.* 23/2; 29-34,1998
- Horvath A., Sajo-Bohus L., Urbani F., Marx Gy  
Radon Concentration in Northern Venezuela Spring Water  
*Bol. Soc. Venezolana de Geol.* 23/2; 25-28,1998
- Sajo Bohus L., Palfalvi J. and Greaves E.D.  
Hot Particle Spectrum Determination by Track Image analysis  
*Radiation Physics and Chemistry* Vol. 51 No 4-6, pp. 467-468, 1998
- Valdes M. Sajo Bohus L. Et al.  
Determinación de la concentración de radioactividad y análisis por fluorescencia de rayos-X de cenizas de petróleo *Acta Cien. Ven.* 48, 4, 1998
- Liendo J.A. et al. Sajo Bohus L.  
A comparison between proton induced X ray emission (PIXE) and Total Reflectio Fluorescence (TXRF) for the elemental analysis of human amniotic fluid. *X-ray Spectrometry* 28, 3-8-1999
- Liendo J.A. et al. Sajo Bohus L  
Use of Rutherford Forward Scattering for Elemental Analysis of Evaporated Liquid Samples  
*American Inst. of Phys. CP* 475, 525-528 1999
- Sajo Bohus L., Palfalvi J., Urbani F., Castro D., Greaves E.D. and Liendo J.A.

Environmental Gamma and Radon Dosimetry in Venezuela  
Radiation Measurements 31 (1999) 283-286

Palfalvi J. Sajo-Bohus L. and Eordogh I  
First Int'l Intercomparison of Image Analysers  
Radiation Measurements 31 (1999) 157-166

Espinoza-Quinones F.R. et al. Sajo Bohus L.  
High-spin State Spectroscopy in  $^{143}\text{Tb}$   
Phys. Rev. C, 60 (1999), 1

Liendo J.A., Gonzalez A.C., Fletcher N.R., Gomez J. Caussyn D.D., Myers S.H., Castelli C. and Sajo Bohus L. Target preparation and characterization for multielemental analysis of liquid samples by use of accelerators. Nucl Instr. Meth. in Phys. Res. A 438 (1999) 65-69.

Sajo Bohus L., Alvarez H., Vazques F.  
Environmental Radioactivity Level in the Cataniapo and Autana River Basin, Amazona, State Venezuela  
Proc. IRPA Reg. Conf. On Rad. Prot. In Central Europe, 22-27 Aug 1999 Budapest Hungary, ISBN 9638051884 (CD) pp 658.

Palfalvi J. and Sajo Bohus Neutron accident dosimeter based on SSNTDs, proceed. 1-st Latin American Symp on Nucl. Tracks, 5-9 April, 1999, Caracas, Venezuela

#### publications (2000 – 2005)

Palacios D., Sajo-Bohus L., Barros H., Barnafoldi G.<sup>1</sup>, Hernath Sz.<sup>1</sup>, Liendo J. and Greaves E.D.  
 $^{40}\text{K}$ ,  $^{232}\text{Th}$   $^{238}\text{U}$  AND  $^{222}\text{Rn}$  Concentration in the orinoco river basin, Venezuela.  
Proc. IRPA Reg. Conf. On Rad. Prot. In Central Europe, 22-27 Aug 1999 Budapest Hungary, ISBN 9638051884 (CD) pp 639-645, 2000

Sajo Bohus L., Greaves, E.D., Liendo J., Barros H., Barnafoldi G. and Hernath Sz.  
Venezuelan Near-Shore Marine And Orinoco River Environmental Gamma Radaition And Radon Measurements  
Proc. IRPA Reg. Conf. On Rad. Prot. in Central Europe, 22-27 Aug 1999 Budapest Hungary, ISBN 9638051884 (CD) pp 658, 2000.

*Increasing reliability in gamma and X-ray spectral data analysis: least moduli approach*  
Kondrashov VS, Rothenberg SJ, Sajo-Bohus L, Greaves ED, Liendo JA  
Nuclear Instruments & Methods In Physics Research Section A446: (3) 560-568 May 21 2000

Development of scintillation detectors for the EXPLODET sensor.  
Pesente S., Nebbia G., Sajo Bohus L., Cinausero M., Fabbris D., Fioretto E., Lunardon M., Prete G. and Viesti G.,  
Annual Report 1999, (15-18); National Institute of Nuclear Physics – Legnaro, Italy, 2000

Kasztovszki Zs., Sajo Bohus L. And Fazekas B.  
Parametric changes of radon ( $^{222}\text{Rn}$ ) concentration in ground water in North-eastern Hungary  
J. of Envir. Rad. 49, 171-180, 2000

Greaves E.D., Marco Parra L.M., Rojas A. and Sajo-Bohus L.  
Determination of platinum levels in serum and urine samples from pediatric cancer patients by TXRF. X-Ray Spectrometry 29, 1-5, 2000

The  $\pi_{h_{11/2}}$ [direct-product] $\nu_{h_{11/2}}$  yrast band in odd-odd  $^{140}\text{Tb}$   
Rizzutto MA, Rao MN, Seale WA, Oliveira JRB, Cybulska EW, Medina NH, Ribas RV, Bazzacco D, Brandolini F, Lunardi S, Petrache CM, Podolyak Z, Rossi-Alvarez C, Ur CA, de Angelis G, Napoli DR,

Spolaore P, Gadea A, De Acuna D, De Poli M, Farnea E, Foltescu D, Ionescu-Bujor M, Iordachescu A, Chatterjee A, Saxena A, Sajo Bohus L  
Physical Review C62, 027302 (2000)

Radon concentrations in hot spring waters in northern Venezuela  
Horvath A, Sajo Bohus L, Urbani F, Marx G, Piroth A, Greaves ED  
Journal Of Environmental Radioactivity 47: (2) 127-133 2000

*Determination of platinum levels in serum and urine samples from pediatric cancer patients by TXRF*  
Greaves ED, Marco Parra LM, Rojas A, Sajo-Bohus L  
X-Ray Spectrometry 29: (5) 349-353 Sep-Oct 2000

Greaves E.D., Bennun L., Gomez J., Nemeth P. and Sajo-Bohus L.  
Determination of Metal-Ligand Stoichiometries for Organic Complexes Reflection X-Ray Fluorescence.  
Inorg. Chem. 39, 3463-3465, 2000

CsI(Tl) scintillators as  $\gamma$ -ray detectors for the identification of hidden explosives  
E. Fioretto, M. Tiana, F. Innocenti, G. Viesti, M. Cinausero, I. Coco, D. Fabris, V. Filippini, M. Lunardon, G. Nebbia, G. Prete, S. Pesente, L. Sajo Bohus, E. Chukhaev and A. I. Melnikov  
Nuclear Instruments and Methods in Physics Research Section A: Vol. 471, 2001, Pag. 234-238

Characterization of gamma spectroscopy tool for humanitarian demining  
Cinausero M., Deak F., Fabris D., Fioretto E. Lunardon M. Nebbia G., Pesente S., Prete G., Sajo Bohus L. and Viesti G.  
Interciencia 26 : (3) 117-121 Mar 2001

J.K. Pálfalvi, L. Sajó-Bohus, M. Balaskó and I. Balásházy  
Neutron field mapping and dosimetry by CR-39 for radiography and other applications  
Radiation Measurements, 34 (1-6) (2001) pp. 471-475

D. Palacios, F. Palacios, L. Sajó-Bohus and J. Pálfalvi  
A new method to measure track density and to differentiate nuclear tracks in CR-39 detectors  
*Radiation Measurements*, 34 (1-6) (2001) pp. 119-122

D. Selmeczi, B. Szabó, L. Sajo-Bohus and N. Rozlosnik  
Morphological changes in living cell cultures following particle irradiation studied by optical and atomic force microscopy  
Radiation Measurements, 34 (1-6) (2001) pp. 549-553

A. Canoba, F.O. Lopez, M.I. Arnaud, A.A. Oliveira, A.M. Osorio, R. Aparecido, C. Rodriguez, G. Espinosa, J.I. Golzarri, T. Martinez, M. Navarrete, L. Cabrera, N. Segovia, P. Pena, E. Tamez, P. Pereyra, M. E. Lopez Herrera, L. Sajo-Bohus  
. Indoor radon measurements and methodologies in Latin American countries  
Radiation Measurements, 34 (1-6) (2001) pp. 483-486

Bermudez J.I., Greaves E.D. Nemeth P. and Sajo Bohus L.  
Determination of Technetium by Total Reflection X-ray Fluorescence  
Spectrochimica Acta B 2247-2251 2001

J.K. Pálfalvi, L. Sajó-Bohus, M. Balaskó  
Realistic neutron spectra for radiation protection and other applications at AERI, Budapest  
Nucl. Instr. Meth. Phys. Res. A 476 (2002) 452-456

Causa R., Coelho D., and Sajo Bohus L.  
Instalation of a Ciclotron in Latin America: The Venezuelan Experience  
ALASBIN J. 5 (21) July 2003



Sajo Bohus L., Barnaföldi G.G., Halász G., Hernáth Sz. And Horváth Á.  
*Educational Cloud Chamber To Improve Nuclear Literacy*  
Proceedings II. International Symposium on Radiation Education  
Debrecen, Hungary 21-25 August 2002. Ed. Ujvari S and Sajo Bohus L. (ISBN 963 8051 949)

Sajo Bohus L., M.C. Scott ; Greaves D. E., Liendo C. J. Castro D . and Palacios D  
Alpha Radiation Energy Loss Experiments With Active And Passive Detectors  
Proceedings II. International Symposium on Radiation Education  
Debrecen, Hungary 21-25 August 2002 Ed. Ujvari S and Sajo Bohus L. (ISBN 963 8051 949)

Sajo Bohus L., Walter J., Greaves E. And Torrealba F., Marx Gy. Pavo Gy., Ladera L.  
A Novel Instrumental Methodology In Radiation Education  
Proceedings II. International Symposium on Radiation Education  
Debrecen, Hungary 21-25 August 2002 Ed. Ujvari S and Sajo Bohus L. (ISBN 963 8051 949)

Antczak, Zs. Kasztovszky, Zs. Révay, A. Antczak, G. L. Molnár, L. Sajó-Bohus and E. D. Greaves  
Characterization of Pre-Columbian Artifacts From Venezuela Using Prompt Gamma Activation Analysis M.  
Proceedings II. International Symposium on Radiation Education  
Debrecen, Hungary 21-25 August 2002 Ed. Ujvari S and Sajo Bohus L. (ISBN 963 8051 949)

Palfalvi, J.K., Akatov, Yu., Sajo-Bohus L., Szabo, J., Eordogh, I., 2003 Evaluation of SSNTD Stacks exposed  
on the ISS. 9-th Symp. On Neutron Dosimetry Sept. 28 Oct 3, Delft, Holland, Book of Abstract 76

J.A. Alfonso, E.D. Greaves, B. Lavelle, L. Sajo Bohus  
Effect of sputtering pressure on residual stressing Ni films using energy dispersive x-ray diffraction  
J. Vacuum Sci. and Technology A 21, (4), 846-850, 2003

J.A. Alfonso, E.D. Greaves, B. Lavelle L.Sajo Bohus  
Control of geometrical sources of error in residual stress analysis by energy-dispersive X-ray diffraction  
J. Strain Anal. Eng. Design 38, 283-288, 2003

J.K. Pálfalvi, Yu. Akatov, L. Sajó-Bohus, J. Szabó and I. Eördögh  
*Cosmic Particle Induced Reaction Detection With SSNTD*  
*Stacks Exposed on-Board of International Space Station*  
Proceedings of the 10<sup>th</sup> international conference on nuclear reaction mechanisms,  
Varenna, Villa Monastero-Italy; June 9 - 13, 2003

L.Sajo Bohus, M.C. Scott, E.D. Greaves, L. Sommerville, S. Green, T. Avila, Loaiza F.  
In Vivo Tibial Lead Measurement to Assess Venezuelan Workers Health Hazard  
J. Radioanaly. and Nucl. Chem. 259, 2 (2004) 251-255

S. M. Suarez. L. Sajo Bohus, E.D. Greaves, J.R. Dominguez V, E. Villar  
TRXRF analysis of Environmental lead and heavy metals to monitor pollution in Caracas, Venezuela  
Nuclear Instr Meth. in Phys. Res. (NIMB) 213 (2004) 784-788

L. Sajó-Bohus, W. A. Gonzalez, J. K. Pálfalvi\*, J. Walter, E.D. Greaves, P. Nemeth, and D. Palacios  
Nuclear Track Analysis With IMAQ™ Vision Builder 6 From National Instruments Contribution to the 2<sup>nd</sup>  
Latin American Symposium on Nuclear Tracks, 3-7 Nov., San Pedro, Brazil 2003

International Conference on Isotopic and Nuclear Analytical Technique for Health and Environment. Vienna  
Austria 10-13 June 2003 Determination of Metals and gamma Radioactivity in Marine Algae from the  
Venezuelan Central Coast

L. Sajo Bohus, D. Palacios, J. Castillo, J. Bermudez, E.D. Greaves  
*Book of Abstracts IAEA-CN-103/ 091, 33, 2003*

Provenance Study of Amerindian Ceramic Figurine with PGNA

M. Antczak, Zs. Kasztovszky, A. Antczak, L. Sajo Bohus  
*Book of Abstracts IAEA-CN-103/062*, 19, 2003  
Published in Nukleonika 2004

Distribution of Gamma Emitter Radionuclides in Coastal Sediments near Venezuelan Atlantic Front  
J. Alfonso, D. Palacios, L. Sajo Bohus, J. Castillo, J. Bermudez  
*Book of Abstracts IAEA-CN-103/090P*, 110, 2003

Gamma Radioactivity in Sediments of Maracaibo Lake, Venezuela  
T. Vilorio, L. Sajo Bohus, D. Palacios, J. Castillo, J. Bermudez  
*Book of Abstracts IAEA-CN-103/093P*, 111, 2003

J. Walter, M. M. Barreiro, E. D. Greaves, L. Sajo-Bohus W. González  
New multichannel analyzer Virtual Instruments in Labview environment  
Accepted in NIM KNO 4566 2004

Palfalvi, J.K., Akatov, Yu., Szabo, J., Sajo-Bohus L., Eordogh, I., 2004 Detection of Primary and Secondary Cosmic Ray Particles Aboard the ISS using SSNTD Stacks.  
*Radiat. Prot. Dos.* 2005 (to be published)

Sajo Bohus L, Ma. M Mackowiak de Antczak, E. D. Greaves, A. Antczak, Bermudez J., Zs. Kasztovszky, T. Poirier and A. Simonits  
Incipient Archaeometry in Venezuela: Provenance Study of Pre-Hispanic Pottery Figurines  
Accepted *J.Radioanal. and Nucl. Chemistry* 2005

Participation in past Conferences 2000-2005:

SLOVENIA2000, Nuclear Track Conference, Portoroz, Slovenia 4-8 Sept. 2000,:

Mexico 2001 IV Latin American Symposium on Nuclear Physics, Mexico, 24-28 Sep. 2001  
Soil gas Radon concentration across faults near Caracas, Venezuela

Congress on Radiation Protection in Central Europe  
Dubrovnik, Croatia, May 20-25,2001

Nuclear Physics Workshop, Collegium Budapest  
Budapest March 27-28, 2001 Hungary

International Data Centre Preparatory Commission for the Comprehensive Nuclear-Test-Ban-Treaty Organization Vienna, Austria 8-th March 2001

IV Latin American Symposium on Nuclear Physics. Mexico 24-28 Sept. 2001

II. International Symposium on Radiation Education  
Debrecen, Hungary 21-25 August 2002

Seventh International Conference on  
NUCLEAR ANALYTICAL METHODS IN THE LIFE SCIENCES (NAMLS-7)  
Including Complementary Isotopic Techniques and Applications,  
Antalya, Turkey, 16-21 June, 2002

Contribution to the 2<sup>nd</sup> Latin American Symposium on Nuclear Tracks, 3-7 Nov., San Pedro, Brazil 2003  
L. Sajó-Bohus, W. A. Gonzalez, J. K. Pálfalvi\*, J. Walter, E.D. Greaves, P. Nemeth, and D. Palacios  
Nuclear Track Analysis With\_IMAQ™ Vision Builder 6 From National Instruments

*10th international conference on nuclear reaction mechanisms*  
*Varenna, Villa Monastero-Italy; June 9 - 13, 2003*

J.K. Pálfalvi, Yu. Akatov, L. Sajó-Bohus, J. Szabó and I. Eördögh  
Cosmic Particle Induced Reaction Detection with SSNTD Stacks Exposed On-Board of the International Space Station

*Workshop on Nuclear Data for Science and Technology: Materials Analysis. Miramare Trieste, Italy 19-30 May 2003*

E.D. Greaves, L. Sajo Bohus, C. De Arriba and M. Manrique  
Prompt Gamma Neutron Activation Análisis in the Venezuelan Aluminium Industry

*1-er Taller en Bombeo, Transporte y Separación de Mezclas Multifasicas, Valle de Sartenejas 23-25 Sept. 2003*

M. M. Barreiro, J. Walter, E. D. Greaves, F. Kenyery, A. Tremante, W. González, F. Torrealba, L. Sajo-Bohus. Técnicas Nucleares Aplicadas a la Medición de Flujo Multifasicos

#### **Berkeley 2004**

Sajo Bohus L., Ma. M Mackowiak de Antczak, E. D. Greaves, A. Antczak, Bermudez J., Zs. Kasztovszky, T. Poirier and A. Simonits. Archaeometry in Venezuela: Provenance Study of Pre-Hispanic Pottery Figurines with NAA and PGNAA

2<sup>st</sup> RCM on "New Applications of Prompt Gamma Neutron Activation Analysis  
Lawrence Berkeley National Laboratory in Berkeley, Building 71, California, 09-13 August 2004

#### **Barcelona 2004**

22- Int'l Conf on Nuclear Tracks, Barcelona 23-27 August, 2004

L. Sajó-Bohus, J. K. Pálfalvi, O. Arevalo, E. D. Greaves, P. Németh, D. Palacios, Szabo J. and I. Eördögh  
Neutron Induced Complex Reaction Analysis with 3D Nuclear Track Simulation

G. Espinosa, J.I. Golzarri, L. Sajo-Bohus, C. Vázquez-López, R. Fragoso and J. Bogard  
*SURFACE FISSION TRACKS ON DIAMOND*

H. Arias, D. Palacios, L. Sajo-Bohus, T. Vilorio  
SIMPLE SYSTEM FOR TRACK ETCHING AND READING IN SSNTD

D. Palacios, L. Sajo-Bohus, T. Vilorio  
Track distributions on LR-115 detector for Radon measurements using diffusion chamber

J.K. Pálfalvi, J. Szabó, Yu. Akatov<sup>2</sup>, L. Sajó-Bohus<sup>3</sup> and I. Eördögh  
Cosmic Ray Studies on the ISS using SSNTD, BRADOS Projects, 2001-2003

D. Palacios, L. Sajo-Bohus, E.D. Greaves  
Radon daughters distributions inside a diffusion chamber and their contributions to track density in SSNT detectors

#### **CORO-2005**

Jornadas Falconinas sobre Aplicacione Nucleares y Divulgacion. Universidad Experimental Fco de Miranda, Coro, 26 –28 Abril 2005.

Niveles de radioactividad en los materiales de cosntruccion V. Urrutia Sajo Bohus L  
Hormesis e Oncogenesis: radiaciones nucleares riesgos y beneficios. L. Sajo Bohus

#### **IGUAZU-2005**

SIXTH LATIN AMERICAN SYMPOSIUM ON NUCLEAR PHYSICS AND APPLICATIONS Iguazú, Argentina from October 3 to 7, 2005

3-D Image Reconstruction of Nuclear Tracks Induced in CR-39 Detectors by means of Digital Holography  
Francisco Palacios , Jorge Ricardo, Daniel Palacios, Laszlo Sajo-Bohus

Tracks registration of cosmic ray and neutron induced nuclear reaction with CR-39 and its implication in astronomical dosimetry

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

Radioisotope neutron activation analysis of cryolite-alumina solutions.

E. D. Greaves, L. Sajó-Bohus, M. Manrique and C. DeArriba

Direct contributions of nuclear science to society: an experience in Latin America

L. Sajó-Bohus, E.D. Greaves

#### **PAVIA 2005**

XIX Nuclear Physics Divisional Conference (NPDC19), Euro Phys Soc., Pavia (Italy), September 5-9, 2005

New Trends in Nuclear Physics Applications and Technology <http://www.pv.infn.it/~npdc19>

Prompt Gamma Neutron Activation Analysis of Prehistoric Pottery Compositional Study in Venezuela

Mackowiak de Antczak Ma. M., Kasztovszky Zs., Sajó-Bohus L., Greaves E.D., Antczak A., Simonits A., D. Palacios

#### International Collaboration with Institutions

I have been actively collaborating with several Latinamerican Universities to set up laboratory experiments, research and teaching programs. For reference are mentioned the

University of Asuncion, Physics Department, Asuncion, Paraguay

University of Cusco, Physics Depart., Cusco, Peru

University of Antofagasta, Antofagasta Chile

Host Institute

KFK-Karlsruhe, Germany 3 month: Nuclear reactor technology

Universidad Nacional La Asuncion Paraguay; 1month; Selection of nuclear equipment

Universidad Nacional La Asuncion Paraguay; two week; Environmental Radon Measurement

Universidad Nacional La Asuncion Paraguay; 1month; Radon determination

Universidad Antofagast Chile; one week; Radon and Gamma radiation measurement

Universidad de Cuzco Peru; One week; Training in environmental radiation

Universidad de Cuzco Peru; one week: radon measurement in water and gamma level determination

Universidad de Cuzco Peru; one week; Lectures on nuclear analytical techniques

University Eotvos, Budapest Hungary; 3 month; environmental radiation measurements

University Eotvos Budapest Hungary; 6 month; Environmental Physics teaching

Neutron Centre Budapest, Hungary; one month. Neutron activation

Atomic Energy Institute Hungary one month Nuclear track detector studies

Universita di Padova Italy; two month; nuclear experiment

INFN Sezione di Padova, Italy; 8 month, Prompt gamma analysis

INFN Catania, Italy, one week, nuclear experiment with CR-39 detectors

Birmingham University UK, Radiation Protection group, two weeks, BNCT project

Birmingham University UK and Clatterbridge Hospital London,, one week, visiting the Centre

EPA-NAREL Montgomery Alabama USA, Emergency response, one month

EPA-NAREL Montgomery Alabama USA, two weeks Laboratory visit (radiochemistry)

University of Besancon France, one week; laboratory visit for a cooperation

Universita di Milano, Italy, Nuclear group, one month, nuclear reactions study

University of Cluj-Napoca Romania, one week, laboratory visit part of a collaboration.

Eotvos University, Atomic Physics Department , Visiting Professor for six months

KFKI-AEKI Collaboration in neutron dosimetry 1984-2005

MTA-KFKI (Budapest Neutron Centre) PGA and INAA technique for Archaeometry study

Belgian Nuclear Research Centre, Mol-Belgium, June, 2005