

1. TO THE TENTH ANNIVERSARY OF THE CELL BIOLOGICAL AND EVOLUTIONARY MICROPALAEONTOLOGICAL LABORATORY

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It has been ten years ago, that Prof. Dr. B. CSÁKÁNY as the Rector of the University agreed the statutes of the Laboratory which regulate in detail the place and the function of our scientific and teaching unit. There were several different events during the last ten years but the Laboratory is in function which was affirmed on the 12. 12. 1995 by an agreement by Prof. Dr. R. MÉSZÁROS, Rector of the University. In the last years several untruthful informations were disseminated by E-mail by some persons concerning the status and the scientific cooperation of the Laboratory. In two numbers (9., 12.) of Plant Cell Biology and Development the refutation was short published of these gossips.

The principle of the scientific and educational program of the Laboratory is the multidisciplinary and the quick acceptance of the new directions in methods and concepts from different disciplines. It is a hope that this was essentially successful. An important task of this period was to solve the generation problems. This was also successful, because always a remarkable number of middle school student are working in the Laboratory giving up a great part of their leisure time. The longstanding cooperation with the EM Laboratory of the Department of Biophysics of the Biological Research Center of the Hungarian Academy of Sciences assured on a high level the ultrastructure researches of the research programs of the Laboratory. In person the joint research programs with Prof. Dr. Á. PÁRDUTZ are extremely fruitful in every respect. Outside the Laboratory the international connects and cooperations are in the first place. The intensive joint research programs with the Birbal Sahni Institute (Lucknow, India), and the Department of Paleontology of the University Complutense of Madrid (Spain) may be emphasized. But the cooperation with the colleagues of Ljubljana (Slovenia), and with the Ain Shams University of Cairo (Egypt), and as new contact the University of San Salvador (El Salvador) were realized during the last times. In retrospect to the last decade we can point out the following:

From the youngest generation of the Laboratory the following middle school students took part in the realization of the research programs: AILER, P., BELLON, A., BENN, O., BORBOLA, A., BORSODI, A., DOBÓ, K., FARKAS, E., GAUDÉNYI, SZ., GUBÁS, T., HEGEDŰS, A., HORVÁTH, A., HORVÁTH, ERIKA, HORVÁTH, ESZTER, KALMÁR, Á., KANCSÁR, T., KOVÁCS, E., MÉSZÁROS, E., MÉSZÁROS, K., MÉSZÁROS, R., OLÁH, I., RONTÓ, G., SASHALMI, J., SCHMÉL, Á., SZÉCSÉNYI, A., SZLÁVIK, N., TERBE, ZS., TOMBÁ CZ, D. and TÓTH, A. During this year PRISKIN, K. started the work in our Laboratory. Among them TÓTH, A., FARKAS, E., BORBOLA, A. and HORVÁTH, ERIKA contin-

ued the work in the Laboratory as university students. After her diploma TÓTH, A. became the member of the Laboratory and BORBOLA, A. is working among orders on diploma thesis. The following university students contributed to the realisation of the research programs: GÁSPÁR, I., GOTTL, E., KEDVES, L., UNGVÁRI, E., VARGA, A. and VÉR, A. Diploma theses were made by GÁSPÁR, I., KEDVES, L. and VÉR, A. PhD Students working on joint research programs with the Laboratory: GULYÁS, S., KOVÁCS, G. The assistants of the Laboratory changed very often because of the low salary. During the last period the following person contributed to the results of the Laboratory: BIRÓ-HALÁSZ, I., ERDŐDI, Á., KÁROSSY, Á., KECSKEMÉTI, V., MARKÓ, E., MÁRAMAROSI, É., PAPP-NAGY, É., PAPP, ZS. and PÖLÖS, K.

Very fruitful scientific cooperations were carried out with the following scientists: HABLY, L. D. Acad. Sci., HETÉNYI, M. D. Acad. Sci., MONOSTORI, M. D. Acad. Sci., PÁRDUTZ, Á. D. Acad. Sci., SAJGÓ, Cs. C. Geol. Sci., SZEDERKÉNYI, T. D. Acad. Sci., BAGI, I. C. Biol. Sci., ROJIK, I. C. Biol. Sci., SZÓNOKY, M. C. Geol. Sci., KINCSEK, I. PhD., SIEGL-FARKAS, Á.

The following colleagues from different countries contributed with different kind of papers to the scientific achievements of the Laboratory: ALMENDROS, G. (Spain), ALVAREZ RAMIS, C. (Spain), ANICIC, B. (Slovenia), BARATTOLO, F. (Italy), BREZIGAR, A. (Slovenia), BUSER, S. (Slovenia), CAFFAU, M. (Italy), CIMERMAN, F. (Slovenia), CLEMENTE BELMONTE, P. (Spain), DEJAX, J. (France), DROBNE, K. (Slovenia), EL-SAADAWI, W. E. (Egypt), FERNANDEZ MARRÓN, M. T. (Spain), GALVANI, R. (Italy), GÓMEZ PORTER, P. (Spain), HERNGREEN, G. F. W. (The Netherlands), JELEN, B. (Slovenia), KRUTZSCH, W. (Germany), KUMAR, M. (India), KUMAR, P. (India), KVAVADZE, E. V. (Georgia), LAAMARTI, N. (Morocco-Spain), LAGOS, J. A. (Spain), MARTIN-ALGARRA, A. (Spain), MONTENEGRO, M. E. (Italy), MOSTAFA, R. M. (Egypt), PAVLOVEC, R. (Slovenia), PAVŠIČ, J. (Slovenia), PIRINI-RADRIZZANI, N. (Italy), PLENIČAR, M. (Slovenia), PUGLIESE, N. (Italy), ROVNINA, L. (Russia), SALARD-CHEBOLDAEFF, M. (France), SKABERNE, D. (Slovenia), SOLÉ DE PORTA, N. (Spain), SMIRNOVA, S. B. (Russia), SRIVASTAVA, S. C. (India), TRIPATHI, S. K. M. (India), TURNŠEK, D. (Slovenia), VEGAS, J. (Spain), YOUSSEF, S. G. M. (Egypt).

Visiting scientists during the last 10 years: **1991:** FERNANDEZ MARRÓN, M. T. (Spain), JELEN, B. (Slovenia), **1992:** FERNANDEZ MARRÓN, M. T. (Spain), DUJMOVIC-KRIZMANIC, K. and KRIZMANIC, K. (Croatia), SRIVASTAVA, S. C. (India), **1993:** JELEN, B. (Slovenia), ALVAREZ RAMIS, C. (Spain), **1994:** CERCEAU, D. (France), JELEN, B. (Slovenia), **1995:** PHILIPPE, M. (France), ALVAREZ RAMIS, C. (Spain), SRIVASTAVA, A. K. (India) **1996:** TRIPATHI, S. K. M. (India), **1997:** YAVUZ, N. (Turkey), SRIVASTAVA, S. C. (India), MARC, P. (France), KUMAR, M. (India), **1998:** ALVAREZ RAMIS, C. (Spain), JUEZ, G. (Chile), STANLEY, E. A. and STANLEY, A. (U.S.A.), **2000:** ALVAREZ RAMIS, C. (Spain).

To the 5th Anniversary of the official recognition of the Laboratory a "Commemorative Medal of the Laboratory" and the "Diploma of the Laboratory" was founded. The following persons were awarded with the above mentioned medal:

1995: Prof. Dr. CSÁKÁNY, B. (Hungary), Mme. VAN CAMPO, M. (France), Prof. Dr. KRUTZSCH, W. (Germany), **1996:** Prof. Dr. PÁRDUTZ, Á. (Hungary), Prof. Dr. ALVAREZ RAMIS, C. (Spain), Prof. Dr. SOLÉ DE PORTA, N. (Spain), **1997:** Prof. Dr. SZEDERKÉNYI, T. (Hungary), Dr. SRIVASTAVA, S. C. (India), Dr. VENKATACHALA, B. S. (India), **1998:** Prof. Dr. NAGY, ESZTER (Hungary), Prof. DR. EL-SAADAWI, W. (Egypt), Prof. DR. STANLEY, E. A. (U.S.A.), **1999:** Prof. Dr. NILSSON, S. (Sweden), Dr. ROWLEY, J. R. (Sweden), Dr. TRIPATHI, S. K. M. (India).

The Laboratory Diplomas were distributed for the following persons: 1995: Dr. KINCSEK, I. (Hungary). TÓTH, A. (Hungary), Dr. I. BAGI (Hungary), 1996: VÉR, A. (Hungary), TRIPATHI, S.K.M. (India), 1997: BORBOLA, A. (Hungary), 1999: Dr. MADHAV KUMAR (India).

To the Tenth Anniversary and the Hungarian Millennium, as it was mentioned previously the "Millennium Medal of the Laboratory" was founded. The two silver medal was offered to Mme. M. VAN CAMPO (France) and to W. KRUTZSCH (Germany). From the 14 copper medal seven was distributed at this occasion, to: C. ALVAREZ RAMIS (Spain), A. CADMAN (South Africa), T.-C. HUANG (Taiwan), M. A. MORBELLI (Argentina), S. C. SRIVASTAVA (India), E. A. STANLEY (U.S.A.), T. N. TAYLOR (U.S.A.).

Probably it was a remarkable result, during this period that it was successful to get the financial support for the printing and the distribution cost of the Laboratory. 12 number of Plant Cell Biology and Development appeared with 100 papers, and with the contribution the following authors: AILER, P., ALMENDROS, G., ALVAREZ RAMIS, C., BAGI, I., BENN, O., BORBOLA, A., BORSODI, A., BREZIGAR, A., BUSER, S., CIMERMAN, F., DEJAX, J., DOBÓ, K., DROBNE, K., EL-SAADAWI, W. E., FARKAS, E., FERNANDEZ MARRÓN, M. T., GAUDÉNYI, SZ., GÁSPÁR, I., GOTTL, E., GUBÁS, T., GULYÁS, S., HABLY, L., HEGEDŰS, A., HORVÁTH, A., HORVÁTH, ERIKA, HORVÁTH, ESZTER, JELEN, B., KALMÁR, Á., KANCSÁR, T., KÁROSSY, Á., KECSKEMÉTI, V., KEDVES, L., KEDVES, M., KINCSEK, I., KOVÁCS, E., KOVÁCS, G., KRUTZSCH, W., KUMAR, M., KUMAR, P., KVAVADZE, E. V., LAAMARTI, N., LAGOS, J. A., MADARÁSZ, M., MARTIN-ALGARRA, A., MÉSZÁROS, E., MÉSZÁROS, K., MÉSZÁROS, R., MONOSTORI, M., MOSTAFA, R. M., OLÁH, I., PÁRDUTZ, Á., PAPP-NAGY, É., PAVLOVEC, R., PAVŠIČ, J., ROJIK, I., RONTÓ, G., SALARD-CHEBOLDAEFF, M., SASHALMI, J., SIEGL-FARKAS, Á., SKABERNE, D., SOLÉ DE PORTA, N., SRIVASTAVA, S. C., SZEDERKÉNYI, T., SZÉCSÉNYI, A., SZLÁVIK, N., SZÓNOKY, M., TERBE, Zs., TOMBÁ CZ, D., TÓTH, A., TRIPATHI, S. K. M., UNGVÁRI, E., VARGA, A., VÉR, A., VEGAS, J. and YOUSSEF, S. G. M. Monographs were also published: 1994: Transmission electron microscopy of the fossil *gymnosperm* exines, 1995: Upper Cretaceous spores from Egypt, 1996: Transmission electron microscopy of the fossil spores.

Papers were published in the following Hungarian reviews: 1991: Bio-Tár, 1991,1992: Őslénytani Viták, 1991, 1992: Acta. Biol. Szeged., 1992, 1999: Ann. Univ. Sci. Sect. Geol., Budapest,1992, 1999: MTA SZAB, 1999: Bot. közl., 1998: Magyar Őslénytani Vándorgyűlés (Tata).

Publications in the following foreign and international periodicals: 1991, 1994, 1995, 1997, 1999: A. P. L. F. Symposium - Abstracts, 1992, 1994, 1996, 1998: A. P. L. E. Symposium - Abstracts, 1992, 1996: Internat. Palynol. Congr. - Abstracts, 1994, 1995, 1997, 1999: Symp. of African Palynology - Abstracts, 1992, 1996, 1998: Taiwan, 1992: International Workshop on Pyrolysis - Abstracts, 1998: European Palaeobot. and Palynol. Conference - Abstract, 1996: American Association of Stratigr. Palynol. Foundation, 1993: Grana Suppl., 1998: Grana, 1994: 11th Slovenian Geol. Meeting - Abstracts, 1992: I. U. G. S. - S. C. G. - Abstracts, 1993: Int. Bot. Congr. - Abstracts, 1993: Int. Meeting on Organic Geochem., 1995: First Croatian Geol. Congr.,1998: Dela-Opera SAZU, 1998: Pollen and Spores 1998 Morphology and Biology. Int. Conf. - Abstracts, 1996: Revista Española de Micropaleontología, 1996: Estudios Palinológicos, 1998: Bot. Macaronésica, 1991: Exploration Geochemistry, 1998: Meded. Nederlands Inst., 1999: 4th Symposium of African Palynology - Abstracts, 1999: XVI. Symp. A.P.L.F. - Abstracts, 1999: VII Symp. on Mesozoic Terrestrial Ecosystems - Abstracts.

Laboratory meetings were organized regularly. In parentheses the name of the students are written after the date of the meeting who contributed to the program

1991 - 01/03 (VÉR, A.), 22/03, 12/04, 17/05 (VÉR, A.), 22/11, 29/11; **1992** - 21/02, 06/03, 24/04 (GÁSPÁR, I.), 20/10, 06/11 (VÉR, A.); **1993** - 05/02, 02/04 (GÁSPÁR, I.), 12/11, 22/12; **1994** - 21/02, 26/03, 02/10, 25/11, 09/12 (GÁSPÁR, I.); **1995** - 27/01, 17/02 (GÁSPÁR, I.), 17/03 (GÁSPÁR, I.), 07/04 (GÁSPÁR, I.), 28/04, 18/08, 22/08, 22/09, 13/10; **1996** - 09/02, 01/03, 22/03 (KÁROSSY, Á., BORBOLA, A.), 19/04 (KÁROSSY, Á., BORBOLA, A.), 22/05, 21/08, 29/08, 13/09, 04/10, 08/11, 29/11; **1997** - 14/02, 07/03, 11/04, 21/08, 22/08, 05/09, 26/09, 31/10; **1998** - 20/02, 28/03, 25/04, 13/06, 21/08, 19/09, 10/10, 07/11 (HORVÁTH, Erika); **1999** - 06/02, 13/02, 13/03, 27/03, 15/05, 21/08, 04/09, 09/10, 20/11, 18/12; **2000** - 29/01, 26/02, 25/03, 29/04, 27/05 (BORBOLA, A.), 08/07, 26/08, 23/09 (BORBOLA, A.), 21/10, 25/11,

Papers were delivered on the following Hungarian scientific meetings:

1992. - 26-27/03: Symmetry - Asymmetry Conference - Szeged. 18/05: Paleobotany and Environment Contributions - Budapest. **1994.** - 09/05: Statutory Meeting of the Symmetry Workshop - Szeged. **1995.** - 15/12: Habilitations Lecture at the Department of Paleontology, Eötvös University - Budapest. **1996.** - 02/12: 1316th meeting of the Botanical Section of the Hungarian Biological Society - Budapest.

1997. - 05/05: 1322nd meeting of the Botanical Section of the Hungarian Biological Society - Budapest. 19/11: Scientific Meeting of the Paleontological Commission of the Hungarian Academy of Sciences - Budapest. 15/12: 1329th meeting of the Botanical Section of the Hungarian Biological Society - Budapest. **1998.** - 06/04: 1334th meeting of the Botanical Section of the Hungarian Biological Society - Budapest. 07/04: meeting of the Geological Section of the Hungarian Biological Society - Budapest. 08-09/05: 1st Hungarian Paleontological Symposium - Tata. 24/08: Conference of Symmetry and Asymmetry - Szeged. 17/09: Paleontological Commission of the Hungarian Academy of Sciences - Budapest. 30/11: 1341th meeting of the Botanical Section of the Hungarian Biological Society - Budapest. **1999.** - 19/04: 1347th meeting of the Botanical Section of the Hungarian Biological Society - Budapest. 29/11: 1353th meeting of the Botanical Section of the Hungarian Biological Society - Budapest.

Contributions on international congresses or conferences and scientific institutions:

1991. - 23-27/09: XII^e Symposium A.P.L.F. - Caen, France. 8-22/10: Spain. **1992.** - 9-11/06: Workshop on Pyrolysis in Organic Geochemistry International Workshop - Szeged. 21-24/07: Joint researches - Slovenia. 06-12/09: 8th Internat. Palynol. Congr. - Aix-en-Provence, France. 05-19/10: Joint researches - Madrid, Spain 30/11-04/12: 9^o Simposio de Palinologia A.P.L.E. - Las Palmas de Gran Canaria. **1993.** - 20-22/05: Scientific meeting dedicated at the occasion of Prof. Dr. W. Krutzsch's 65th birthday - Berlin, Germany. 27/08-05/09: XVth International Botanical Congress - Yokohama, Japan. 18-26/09: XIIIth Symp. of the A.P.L.F. - Besançon, France. 11-25/10: Joint researches - Madrid, Spain. **1994.** - 01-06/08: Common working with Dr. B. JELEN - Ljubljana. 16-23/09: Xth A.P.L.E. Symp. - Valencia. 24/09: Joint researches - Barcelona. **1995.** - 20-26/01: Joint researches - Lucknow, India. 05-10/03: 2nd Symp. of African Paly. - Teruren, Belgium. 11-14/03: Joint researches - Barcelona, Spain. 16-19/09: 14^e Symp., Association des Palynologues de Langue Française, Palynologie et Changement Global - Paris, France. 19-22/10: First Croatian Geological Congr. - Opatija, Croatia. **1996.** - 23-28/06: Ninth International Palynological Congress. - Houston, Texas. 18-20/09: XI Simposio de Palinologia, A.P.L.E. - Alcalá de Henares, Spain. 23-27/09: Joint researches - Madrid, Spain. **1997.** - 26/03-01/04: Joint researches - Barcelona, Spain.



08-10/06: Joint researches Barcelona, Spain. 29/08-03/09: XVème Symp. A.P.L.F. - Lyon, France. 12-21/09: 3rd Symp. of African Palynology - Johannesburg, South-Africa. **1998.** - 27/01-07/02: Visit at the Birbal Sahni Institute of Palaeobotany - Lucknow, India. 08-11/02: Visit at the Indian National Science Academy - New Delhi, India. 25/06-01/07: 5th European Palaeobotanical and Palynological Conference - Krakow, Poland. 04-10/07: Pollen and Spores 1998 Morphology and Biology, The Royal Botanic Gardens - Kew, London, U. K. 26-28/09: Joint researches - Madrid, Spain. 29/09-03/10: XII. Simp. de Palinologia A.P.L.E. - Leon, Spain. **1999.** - 23/02-08/03: Visit at the Birbal Sahni Inst. of Palaeobotany - Lucknow, India. 24/04-02/05: 4th Symp. of African Palynology - Sousse, Tunis. 13-19/09: XVI th Symp. of A.P.L.F. - Liège, Belgium. 26/09-01/10: VII Internat. Symp. on Mesozoic Terrestrial Ecosystems - Buenos Aires, Argentina. **2000.** - 24-30/06: Xth Internat. Palynol. Congress - Nanjing, China.

Teaching programs: Introduction to the pre-Quaternary Palynology I., II. Introduction to the Supernova Theory. Theory of the evolution and its natural phylosophical relations.

Basic palynology. Applied palynology. Ultrastructure of the plant cell wall. Quasi-crystalloid biopolymer systems.

The function of the Laboratory was assured in the first place by grants. The following competitions for grants were succesful: MM (Ministry of Culture) ÁMB (1986-1989), OTKA (National Scientific Research Programs):1/2-88, 1/3-104, 1/5 T007206, 1/7 T 014692, recently T/9 023208 and T 031715, U - 21427, U - 31146, P 31176, B 011106, AKP 98/26.2,5/23 (Foundation of the Hungarian Academy of Sciences). The publications of the Laboratory were supported regularly or occasionally by several personalities and Institutions. Many thanks to: Presidium of the Hungarian Academy of Sciences, to Dr. D. KOSÁRY, President and Dr. I. LÁNG, Secretary General, to Dr. Gy. TELEGDY President and Dr. T. BALOGH Secretary of the Regional Committee of the Hungarian Academy of Sciences, Szeged. To Dr. K. TANDORI, member of the Hungarian Academy of Sciences. To Prof. Dr. B. CSAKÁNY as Rector of the University, Prof. Dr. J. CSIRIK as Rector of the University, Prof. Dr. R. MÉSZÁROS as Rector of the University. To Prof. Dr. I. DÉKÁNY as Scientifical vice-rector of the University, Prof. Dr. B. RÁCZ as Scientifical vice-rector of the University, Prof. Dr. I. NAGYPÁL as Scientifical vice-rector of the University. To Prof. Dr. R. MÉSZÁROS as Dean of the Faculty of Sciences, Prof. Dr. K. VARGA as Dean of the Faculty of Sciences, Prof. Dr. G. MEZŐSI as Dean of the Faculty of Sciences. To Dr. T. KECSKEMÉTI, president of the Hungarian Geological Society. To Dr. I. SZALAY Major and Dr. I. FARKAS Town-Councillor of the Local Government of Szeged. To the Hungarian Oil and Gas Industrial Company, to Mr. G. JÓZSEF business manager and Mr. Cs. GALÁNFI head of department. To the Foundation for Szeged. To the Foundation for the Science of the South Hungarian Plain. To the CSIC - Instituto de Geologia Economica, Madrid, Spain Proyecto PB 92-0101.

The linguistic corrections of the English text were made by Dr. R. ZÁNTHÓ Ass. Prof. of the Dept of the English Language of the J.Gy. High School, we regret that he deceased on the 15.07.2000. We lost a very nice and a very helpful person. Thanks to Dr. Zs. GÉCSEG (Department of the French Institute of J.A. University) for the linguistic corrections of the French manuscript.

The first part of the publications of the Laboratory were published by the Szegedi Nyomda. In 1994 the following monograph "Transmission electron microscopy of the fossil *gymnosperm* exines" was published by the Juhász Nyomda. After this all publications of the Laboratory were published by this printing office. Very fruitful relationships are with this printing office. We are very grateful to Mr. P. JUHÁSZ (head of the printing office) and to Mr. Z. KORPA (co-worker of the printing office) for its excellent work.