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HISTORY OF THE DEPARTMENT OF GEOMETRY BETWEEN ANNIVERSARIES 25 AND 40

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History of the first 25 years of the Department of Geometry was published in detail – with a detailed survey of the prehistory – in the Jubilee issue of *Periodica Polytechnica, Mech. Eng.* No. 2, Vol. 21(1977) pp. 65-80. The Department named at that time Department of Descriptive Geometry, was established by decree No. 854-0128/1952 of the Ministry of Education dated 8th August, 1952. Now, at the 40th anniversary, it seems justified to recall events of the past 15 years.

Already the former account reported the extension of the scope of the subject imparted to first-year mechanical engineering students since the academic year 1973/74, then since 1975/76 by adding chapters of vector geometry and differential geometry of curves and surfaces. This motivated to rename the subject 'Descriptive Geometry' to 'Geometry' in academic year 1975/76, delivered in three lessons and three exercises a week in both semesters of the first year. Also mathematician engineering education at the Faculty of Mechanical Engineering started in the academic year 1973/74, where studies in geometry were delivered by this Department from the very beginning. These changes induced this Department and the Rector to initiate at the supervisory authorities of the University to change the name 'Department of Descriptive Geometry' to 'Department of Geometry', taken place through decree No. 27009/1978.VII of the Ministry of Education dated January 9, 1979.

The Department was headed from the academic year 1952/53 to 1985/86 by Gyula Strommer, from the academic year 1986/87 to 1991/92 by István Reiman.

By the time of its establishment, authorities wanted to separate education and research, so no scientific research could be expected from the initial staff. Since the 60's, appointments to senior assistant, associate professor and professor were conditioned by the degree of Dr. Techn. or degrees of the Hungarian Academy of Sciences (Candidate of Sciences, Doctor

of Sciences), but this condition could only be fully applied for instructors employed after the mid-fifties. This restricted system of appointment has only generalized later at the University.

In academic years 1977/78 to 1991/92 the staff of the Department of Geometry comprised:

Professor Gyula STROMMER, dipl. mechanical engineer, Dr. rer. nat., Dr. math. sci.; 1980/81 to 1986/87 Dean of the Faculty of Mechanical Engineering; 1973 to 1980 member of the Committee of Mathematics of the Hungarian Academy of Sciences; 1980 to 1984 member of the Special Committee of Mathematics of the Postgraduate Degree Granting Board of the Hungarian Academy of Sciences; 1981 to 1987 chairman of the Editorial Board of the Mechanical Engineering series of Periodica Polytechnica; reviewer of 'Mathematical Reviews', retired on January 1st, 1991; has been educating at this Department since September 1st, 1952, and so does now.

Professor János SZENTHE, dipl. secondary school teacher, Dr. rer. nat., Dr. math. sci.; reviewer of 'Zentralblatt für Mathematik' and of 'Mathematical Reviews'; had been educating at this Department October 1st, 1956 to June 30, 1968 and July 1st, 1973 to August 31, 1990.

Associate Professor Emil MOLNÁR, head of department; dipl. secondary school teacher, Dr. rer. nat., Cand. math. Sci.; reviewer of 'Zentralblatt für Mathematik'; editorial board member of 'Beiträge zur Algebra und Geometrie'; has been teaching at this Department since September 1st, 1990.

Associate Professor Márta SZILVÁSI NAGY, dipl. secondary school teacher, Dr. rer. nat., Cand. math. sci. (appointed associate professor July 1st, 1990); has been teaching at this Department since August 1st, 1974.

Associate Professor István REIMAN, dipl. secondary school teacher, Dr. rer. nat., Cand. math. sci., member of the Special Committee for Mathematics and Computer Sciences of the Postgraduate Degree Granting Board of the Hungarian Academy of Sciences; has been educating at this Department since July 1st, 1970.

Associate Professor Imre VERMES, dipl. secondary school teacher, Dr. rer. nat., Cand. math. sci., reviewer of 'Zentralblatt für Mathematik'; has been teaching at this Department since July 1st, 1963.

Associate Professor Endre PETHES, dipl. secondary school teacher; had been educating at this Department from August 15, 1952 to June 30, 1988; now retired.

Senior assistant Ákos G. HORVÁTH, dipl. mathematician, Dr. rer. nat., (appointed senior assistant January 1st, 1990); reviewer of 'Zentralblatt für Mathematik'; has been educating at this Department since September 1st, 1984.

Senior assistant Pál LEDNECZKI, dipl. secondary school teacher, Dr. rer. nat., (appointed senior assistant January 1st, 1983); has been educating at this Department since November 8, 1977.

Senior assistant Gábor MOLNÁR–SÁSKA, dipl. secondary school teacher, Dr. rer. nat., (appointed senior assistant January 1st, 1982); has been educating at this Department since August 1, 1974.

Senior assistant László VERHÓCZKI, dipl. secondary school teacher, Dr. rer. nat., (appointed senior assistant January 1st, 1989); has been educating at this Department since August 1st, 1985.

Senior assistant Mária KÁDÁR–KORECZ, dipl. secondary school teacher; had been educating at this Department since August 7, 1952 to July 31, 1984; retired.

Senior assistant György HÁVEL, dipl. secondary school teacher; had been educating at this Department from August 1st, 1953 to January 31, 1989.

Assistant KÁROLY BÖRÖCZKY, jr., dipl. mathematician, Ph. D.; 1989 to 1992 fellowship holder (Calgary, Canada); had been educating at this Department September 1st, 1988 to August 31, 1992.

Assistant István PROK, dipl. secondary school teacher, dipl. programming mathematician; has been educating at this Department since September 1st, 1988.

Assistant Jenö SZIRMAI, dipl. secondary school teacher; has been educating at this Department since September 1st, 1992.

Remind of our deceased colleagues:
Associate professor János SCHOPP, retired (1910-1980);
Senior assistant József ERDÖSI, retired (1904-1988);
Associate professor István ZANA, retired (1907-1992).
Be honour to their memory.

In the past fifteen years, educational work of the Department of Geometry primarily concerned delivery of the subject 'Geometry' to first-year Mechanical Engineering students, and to Mathematical Engineering students, as well as guidance of drawing room and computation exercises. Beginning with academic year 1984/85, Dean of the Faculty of Civil Engineering invited Prof. Gyula Strommer to deliver Descriptive Geometry for first-year students of Civil Engineering, and to arrange relevant drawing exercises.

Weekly number of lessons for first-year students of Mechanical Engineering: in both semesters of academic years 1975/76 to 1981/82, three lessons and three exercises, while in both semesters of academic years 1982/83 to 1988/89 two lessons and three exercises a week. Beginning with academic year 1988/89, the subject matter was added chapters 'Linear Point Transformations' and 'Display of Smooth Curves and Surfaces by

Means of Spline Functions'. Beginning with academic year 1989/90, the autumn semester has comprised two lessons and three drawing room and computer exercises a week; the second semester has comprised one lesson and two exercises a week, furthermore, in frames of the subject 'Mechanical Engineering Exercises' a total of six drawing-room exercises for developing plate designs.

Weekly number of lessons for mathematical engineering students: in first semester of academic years 1977/78 to 1989/90, three lessons and three exercises, while in the second semester two lessons and three exercises. Beginning with academic year 1990/91, mathematician-engineering students are appointed among students of so-called raised-niveau lessons and exercises at the beginning of the third semester.

Civil Engineering students were delivered weekly three lessons and four exercises in first semesters of academic years 1984/85 to 1991/92, thereafter imparted in two lessons and three drawing-room exercises.

At the Faculty of Mechanical Engineering, first-year correspondence courses ended with academic year 1986/87. Since 1984/85 complementary education – among others, in the subject 'Geometry' – is given high-school graduates to be granted the degree of dipl. mechanical engineer. Enrollments are seen in this table:

The Department staff offer special lectures at higher courses of the Faculty of Mechanical Engineering. Lectures entitled Mechanical Applications of Differential Geometry; Programmed Computer Graphics; CAD Implements of Geometry; Surface Fitting Procedures – Spline Technics for Surfaces; Computer Geometry were taken as optional subjects by second– and third–year mechanical engineering students; underlying outstanding papers for the Scientific Students' Circle.

In recent times, our staff has made study trips in Belgium, France, Germany, the USA and in Canada, collecting experience concerning education in mathematics and in geometry at universities abroad. Several of them acted as invited professors of geometry and CAD geometry in these countries and took part in shaping these educational profiles. Excellent professional relations exist with the Department of Geometry of the Technical University of Prague, as well as with institutes of geometry of technical universities in Vienna, Graz and Leoben. The staff regularly attends and delivers lectures at international conferences and congresses in all Europe.

In the past period, central state support primarily of scientific research work diminished to a degree making it impossible to subscribe to technical periodicals from abroad for the Department's library. Some increase of the holdings is due to having successfully competed for research projects announced by the Hungarian Academy of Sciences in frames of so-called OTKA projects; in these projects this Department made successful research

Table 1

Academic year		Regular			Comple-	Evening	Corr.
		Mech. eng. students	Math. eng. students	Civil eng. students	mentary education	course	course
1977/78	I	400	20			55	40
	II	347	27			56	43
1978/79	I	400	30			70	50
	II	332	30			60	50
1979/80	I	300	25			80	60
	II	271	16			61	61
1980/81	I	270	25				70
	II	258	20				60
1981/82	I	270	25			36	30
	II	319	19			27	48
1982/83	I	320	20			46	45
	II	302	23			19	28
1983/84	I	270	20			39	32
	II	271	16			35	31
1984/85	I	280	20	256	130		33
	II	263	18		130		29
1985/86	I	300	25	225	88		
	II	268	24		88		
1986/87	I	300	26	254	75		25
	II	284	24		75		20
1987/88	I	300	20	249	66		
	II	282	26		66		
1988/89	I	300	25	243	69		
	II	303	25		69		
1989/90	I	320	14	262	47		
	II	315	12		47		
1990/91	I	350		242	49		
	II	334			49		
1991/92	I	350		253	53		
	II	332			53		

work in geometry. Actually, research work is financially supported by two OTKA projects.

In the past fifteen years, the staff was granted one degree of Candidate, four degrees of Dr. Univ., and one degree of Ph. D., all of them in the subject of geometry.

To appreciate scientific activities at this Department and to describe

advancement of the new generation of researchers, – with a view on the rigorous system of appointment criteria – the following compilation may be of help:

Table 2

Academic year	Professor	Assistant Professor	Senior Assistant	Assistant	Number of teaching staff
1977/78	1	4	3	2	10
1978/79 — 1980/81	2	3	3	2	10
1981/82	2	3	4	1	10
1982/83 — 1983/84	2	3	5	—	10
1984/85	2	3	4	1	10
1985/86 — 1987/88	2	3	4	2	11
1988/89	2	2	5	3	12
1989/90	2	2	5	2	11
1990/91	1	4	4	2	11
1991/92	1 em.	4	4	2	10

Computerizing this Department started by purchasing a personal computer (PC) Commodore 64 in 1983, financed by winning a competition announced by the Ministry of Education. In the academic year 1986/87, within the program G6, this Department obtained an IBM-compatible AT PC completed with other graphic peripheries (plotter, digitalizer). Two further AT computers were obtained via competition. The Board of the Faculty of Mechanical Engineering settled an AT PC at this Department, for administrative work. Computers are applied in a wide range of uses, both in research and development of computer geometry, and in assisting other theoretical research work. Connection of our computers to the University network is going on.

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