

Professor Józef Siciak—a scholar and educator

The preface to a Festschrift offered to an eminent scholar is usually written by a disciple of his, possibly a former doctoral student. It may, therefore, come as a surprise that this volume is different: the author of this introductory essay does not specialise in complex analysis, does not belong to any of the groups that have emerged from Professor Siciak's School, is not a member of the "Siciak Scientific Family". However, the violation of the rule is only apparent. The point is that Professor Józef Siciak's students comprise a far, far broader circle than the genealogy of the "Scientific Family", impressive as it is, might suggest.

Who, then, can be called a student of an eminent mathematician? Is this title reserved for those who have written a doctoral dissertation under his supervision? Or those whom he has led to the frontline of research? Or is it, perhaps, a broader category which also includes students who attended the professor's lectures and then chose a different branch of mathematics to specialise in, or even those who graduated and found jobs as mathematicians, although not in research? The answer is simple: In this context, the category of "student" is indeed much more inclusive, on condition, however, that the student did learn something valuable from the master. Many excellent mathematicians, when asked about their teachers, mention numerous names, although, certainly, not all of their instructors.

This also explains the phenomenon of Professor Józef Siciak. One can venture to say that practically all Cracow mathematicians, except for a narrow group of his approximate coevals, are students of Professor Siciak.

For more than thirty years, every class of students has attended his lectures in complex analysis. Moreover, Professor Siciak has taught mathematical analysis for many years. The course of analysis, by far the most important part of mathematical studies, takes two years; all the remaining courses need to be properly synchronised with this one. It can be seen as a backbone on which the entire curriculum is based. Many students who came to the university thus attended the Professor's lectures already in their first years. This was also the case with my group.

The lectures in mathematical analysis, and later on, analytic functions, were a fascinating experience for us students. Everyone was impressed by

Professor Siciak's teaching. It is hard to do justice to these lectures in writing and provide their adequate description. Sometimes a lecture is a means of transferring information from the teacher's notes to the students' notes without passing through the mind of either. This is never the case with Professor Siciak's lectures. They provide a most convincing demonstration that it is possible to talk about mathematics in a captivating manner, addressing the audience and not the blackboard. For us, these lectures were like a sensational novel: we listened agape, following the argument and waiting for what's going to come next. "How interesting! How beautiful"—these words best describe our reactions. Mathematics *is*, of course, interesting and beautiful, as every mathematician knows. But every mathematician is likewise aware how easy it is to conceal the beauty of mathematics behind a plethora of symbols, through which few listeners will be able to discover its most special qualities. At Professor Siciak's lectures, the charm of mathematics was brought home to everyone. What was also very important for us was the feeling that this is a great mathematician talking to us. Although he taught us basic things, we could nevertheless see in our instructor a world-class scholar.

The contents of the analysis lectures seemed to us the easiest part of the curriculum, even though, as we realised only much later, it was the most difficult subject. The Professor was a real miracle worker in this respect. I think two elements were of decisive importance here. One was the appropriate organisation of and an original, creative approach to the material—we would reach a difficult corollary not even noticing the fact. The other was the presentation. We felt as if we were listening to a riveting story, told by a smiling Professor Siciak in a beautiful and elegant language, and then all of a sudden it would turn out—what a pity!—that that was all for now and the story would continue the following week. The Professor's unmistakable smile, so cheerful and friendly, helped us greatly to absorb his lectures.

The Professor would always bring to the lecture hall a piece of high-quality glossy paper, sometimes called "chalk paper"; he would begin his lecture by carefully wrapping in it a piece of chalk. He quipped that this must explain the name of this type of paper: it was ideal to wrap chalk in. Normally, the piece of chalk thus prepared would last him for the whole lecture. The Professor rarely used notes—the lecture usually proceeded "straight from his head".

Professor Siciak never seemed to hurry or to squeeze as much material as possible into one lecture. Clearly, his main objective was to make us understand and grasp the essence of the subject matter. The lecture would always begin on time and end on time: everything was perfectly prepared—carefully timed and thoughtfully laid out on the blackboard, where everything had its proper place. Throughout the lecture, we felt it was intended for us,

students. *We* were the principal, focal element. While talking to us, the Professor observed the audience and our reactions. But he also had other ways of checking our understanding. It is customary for lecturers to leave some proofs for students to complete at home. Professor Siciak was the only one who actually had us present these proofs at the lecture. Usually, he asked for a volunteer to do it, but sometimes he would pick the spokesperson himself from the audience. It did not matter that this would leave him with less time to present new things: this time was by no means wasted.

By observing the audience, he would get to know the students. Although the group was large, he knew very well who attended his lecture. Some examples will follow to illustrate this point.

It happened once that a new face appeared among the audience, but after the break, the newcomer was gone. When the Professor came back to the room, the first thing he said was: “And who was this gentleman who sat here during the previous hour?” One of the students explained he had taken the liberty of inviting to class a friend of his, a maths enthusiast who was keen on attending a real university lecture. Professor Siciak commented: “What kind of enthusiast is he, if he didn’t wait for the second part of the lecture?”

On another occasion, the Professor assigned homework already during the initial lecture for the first year. The following week he asked who could present the solution. He looked at one of the girls: “How about you, madam? No, not you: you weren’t here last time.”

Himself an excellent lecturer, Professor Siciak expected a lot from his listeners. We knew that latecomers disturbed him. Therefore, a student who was late did not normally enter the room but waited outside for the break. It happened once, however, that a student came to class a couple of minutes late. The Professor was busy at that moment, writing some formula on the blackboard. He did not even turn around, did not look at the newcomer, indeed, seemed unaware that anybody had come in. As some noises filtered in from the corridor, he turned away from the blackboard and said: “This noise is a real nuisance. Would somebody please go outside and tell those people to be quiet.” Then he paused and added, looking at the latecomer: “Oh, you’ve been late, so perhaps you will do it.”

In my student days, a Xerox machine was an unattainable luxury; it was, therefore, normal practice to use carbon paper to take lecture notes in duplicate for those absent. Professor Siciak’s lectures invariably attracted a nearly 100-percent turnout, but some students occasionally fell ill. When a student once took notes for her friend in such a situation, the Professor was quick to spot it and ask: “Is it for the police you write it down?”

I also remember Professor Siciak asking his audience during a lecture: “And what happened with this young man from Wieliczka? I haven’t seen him here for several weeks...”

There is one more story I'd like to mention, to show what great importance Professor Siciak attached to the reception of his lectures by students. When I was in my first year, the Professor's lecture in analysis began at 12.15 p.m. on Friday. The previous lecture was scheduled to finish at 12 sharp. On one occasion, the other lecturer's watch had stopped and he went on talking, while we were too abashed to tell him that time was up. Finally, at 12.20, one of us mustered the courage to tell him that our next lecture had just begun. The lecturer ended the class immediately, apologised, and we rushed to Professor Siciak to make amends for our failure to turn up on time. When he learned what had happened, he decided his lecture would begin 15 minutes later. It didn't matter that it would be almost half an hour shorter. What did matter was that we should be able to listen attentively. Besides, Professor Siciak told us that, in the event his own watch broke down, it was our duty to tell him immediately when the scheduled lecture time had expired.

And so we attended the lectures and looked up to the Professor with great admiration. Interestingly, at school the pupils give a nickname to nearly every teacher, which begins in time to function almost like a proper name; at the university this happens only rarely. Professor Siciak had no nickname, but we sometimes referred to him as "Mistrz" ("Master"). This was, of course, due to both the quality of his lectures and his great mathematical acumen, plain to see by what he said and *how* he said it.

There was a general admiration for the Professor. I remember when a friend of mine, two years my senior, who had also attended his analysis lectures, asked me: "Is your year as much enamoured with Siciak as ours is?"

Many people who decided to pursue the study of complex analysis did so under the influence of Professor Siciak: his personality and his classes—both course lectures and numerous monograph lectures. Students who decided to link their mathematical careers with Professor Siciak and his group form a large and ever expanding circle. The Professor's students made rapid academic progress and quickly obtained doctorates. Many young people studied under the tutorship of Professor Siciak's disciples, too. The academic interests of the latter group were very broad and the range of problems they worked upon was ever increasing. Almost imperceptibly, but inevitably, a real academic school had formed around the Professor. It was concerned with complex analysis and various other branches of mathematics related in one way or another to the latter. In its development, the school emulates the best academic patterns and traditions. Students of Professor Siciak, together with their students, form today the core of three chairs at the Mathematics Institute, Jagiellonian University: the Chair of Mathematical Analysis, the Chair of Analytic and Algebraic Geometry, and the Chair of Approximation Theory. Presented below is the impressive "family tree" of doctors who

have completed their dissertations under the supervision of the Professor or his students (the year of obtaining the doctorate and the degree currently held by each person are given in brackets). A dozen or so new doctorates and habilitations are in preparation. The “family tree” does not include the innumerable students who have prepared their master’s thesis under the tutorship of Professor Siciak and his disciples.

- * (1972) Tadeusz Winiarski (prof. dr hab.)
 - ** (1984) Piotr Tworzewski (prof. dr hab.)
 - *** (1992) Sławomir Cynk (dr hab.)
 - *** (1996) Ewa Cygan (dr)
 - *** (1999) Sławomir Rams (dr)
 - *** (2002) Danuta Ciesielska (dr)
- ** (1989) Zbigniew Jelonek (dr hab.)
- ** (1999) Marek Karaś (dr)
- ** (2002) Paweł Gniadek (dr)
- * (1972) Wiesław Pleśniak (prof. dr hab.)
 - ** (1986) Jan Sudolski (dr)
 - ** (1986) Adam Wójcik (dr)
 - ** (1988) Grzegorz Lewicki (dr hab.)
 - *** (2001) Lesław Skrzypek (dr)
 - ** (1990) Mirosław Baran (dr hab.)
 - ** (1999) Jerzy Szczepański (dr)
 - ** (2000) Marta Kosek (dr)
- * (1973) Kamil Rusek (prof. dr hab.)
 - ** (1992) Krzysztof Nowak (dr hab.)
 - ** (2000) Marcin Skrzyński (dr)
- * (1973) Jan Chmielowski (dr)
- * (1974) Ludwik Drużkowski (prof. dr hab.)
 - ** (1996) Halszka Tutaj-Gasińska (dr)
 - ** (2002) Jerzy Gurycz (dr)
- * (1975) Małgorzata Downarowicz (dr)
- * (1975) Maria Mazurek (dr)
- * (1976) Zygmunt Wronicz (dr hab.)
- * (1977) Marek Jarnicki (prof. dr hab.)
 - ** (1995) Włodzimierz Zwonek (dr hab.)
 - ** (1995) Armen Edigarian (dr)
- * (1977) Wojciech Kucharz (dr)
- * (1978) Konrad Czaja (dr)
- * (1979) Adam Janik (dr)
- * (1980) Piotr Jakóbczak (dr hab.)
- * (1981) Maciej Klimek (dr, professor of the University of Uppsala)

- * (1981) Krzysztof Reczek (dr)
- * (1989) Sławomir Kołodziej (dr hab.)
 - ** (2002) Rafał Czyż (dr)
- * (1991) Mieczysław Jędrzejowski (dr)
- * (1995) Zbigniew Błocki (dr hab.)

The greater part of the doctoral dissertations written under the supervision of Professor Siciak were awarded various distinctions. Nowadays, the doctoral students of the Professor and his followers work at practically all the academic institutions in Cracow and many universities elsewhere. A group of excellent researchers has thus arisen, with an ever-growing academic potential. The Cracow specialists in complex analysis, headed by Professor Siciak, enjoy a brilliant worldwide reputation. They are regularly invited to participate in prestigious international conferences and guest lecture at major academic centres.

The mathematical results obtained by Professor Siciak and his “Scientific Family” are of the highest order of magnitude. I will just mention briefly some of them: to summarise Józef Siciak’s results would require a sizable monograph study, and an account of the work of his school would take several volumes.

Józef Siciak is the author of over 80 scientific publications. Their subject matter is varied, involving multiple, intersecting areas of study. These works could be roughly classified according to their content into five groups of similar size. These include: general theory of complex functions of several variables, extremal functions, approximation theory, analytic continuations and pluripotential theory.

Since the late 1950s, the Jagiellonian University mathematicians who make up the Siciak school have published more than 500 papers and books on complex analysis and related fields. A classification of these into subject areas—once again inevitably simplified—would include, in addition to the above-mentioned five, also algebraic geometry, invariant distances, intersection theory and polynomial automorphisms.

Siciak’s works contain results of extraordinary scientific rank and great importance for complex analysis. First to be mentioned are his contributions to the theory of extremal points and extremal functions. This subject matter is an extension of the research done by Siciak’s teacher, Franciszek Leja—the founder of the method of extremal points and extremal functions. However, unlike Leja and some of his students, Siciak focused principally on constructing extremal functions independently of extremal points. This approach yielded excellent results, including, in particular, the construction of extremal functions of several complex variables. Especially noteworthy is one of these extremal functions, generally referred to worldwide these days as

Siciak's extremal function. It was introduced in Siciak's paper *On some extremal functions and their applications in the theory of analytic functions of several complex variables* published in *Transactions of the American Mathematical Society* 105 (1962), 322–357. Siciak used it to prove a multivariate version of the Bernstein–Walsh Theorem on polynomial approximation of germs of holomorphic functions on compact subsets of \mathbb{C}^n . Further research demonstrated that Siciak's extremal function established a very important link between polynomial approximation in several complex variables and pluripotential theory introduced by E. Bedford and B. A. Taylor in the mid-1970s. Siciak's extremal function is today a fundamental tool in pluripotential theory, a field in which the Professor attained further difficult and significant results and his school of research counts among the worldwide leaders.

Many important results of Professor Siciak's concern separately analytic functions. One should mention in this context especially the theorems on the extensions of separately analytic functions defined on a cross, which provide today the foundation of the whole theory. These theorems are significant generalisations of the classic Hartogs theorem and the related results obtained by Bernstein, Lelong, Browder, Cameron and Starwick.

Another important area to which Professor Siciak has made a substantial contribution is analytic functions on topological vector spaces. Some of these results have been obtained jointly with Jacek Bochnak. This work has led to the unification of some fundamental concepts and theorems, the development of the theory of this class of functions, and some key results obtained thanks to the application of an appropriately constructed theory of series of homogeneous polynomials and a generalisation of Leja's Polynomial Lemma.

Professor Siciak's work on complex analysis has inspired specialists in this subject worldwide to undertake new research. The Professor's works published in the 1960s confirmed his position as a top specialist and gave rise to broad international collaboration.

Several of the Professor's publications were joint works. Apart from Bochnak, the co-authors included: Jerzy Górski, Zdzisław Opial, Stanisław Łojasiewicz, Sławomir Kołodziej, Ewa Ligocka, Nguyen Thank Van, Menahem Schiffer, Peter Pflug and the physicists: Andrzej Białas and Romuald Wit.

It should be added that many interesting results obtained by Józef Siciak's group, as well as new promising research trends, some of which have already brought interesting results, arise from the collaboration between members of this group and mathematicians from other chairs at the Department. In particular, mention is due to the research work conducted jointly with Professor Stanisław Łojasiewicz's group, which focuses mainly (though not exclusively) on complex analytic geometry.

Outstanding mathematicians not only write excellent papers, but also are given the privilege (and responsibilities) of membership in the editorial boards of various journals. This is also the case with Professor Siciak. Already in 1971, he became Deputy Editor-in-Chief of *Annales Polonici Mathematici*, on whose editorial board he had served for several years. Since 1981, he has been Co-Editor-in-Chief of this journal. He is also a member of the Editorial Board of *Bulletin of the Polish Academy of Sciences—Mathematics*.

One more aspect of Professor Siciak's academic pursuits deserves mention in the context of his publishing activities. Many of his articles containing outstanding results are printed in Polish journals and in particular, in two titles published in Cracow: *Annales Polonici Mathematici* and *Universitatis Jagellonicae Acta Mathematica*. Siciak's works contribute significantly to the standing of these two journals. It is due, among others, to Siciak's publications that so important results can be found in the Cracow journals (nowadays, Polish mathematicians publish mostly abroad). This vastly increases the international prestige of these titles. The publication of high-quality papers, like Siciak's, in the Cracow journals has an additional beneficial effect: the high level of these publications attracts many excellent foreign mathematicians, who are interested in publishing in Poland.

Professor Siciak's publications are not restricted to new scientific results. He has also written papers devoted to the history of mathematics—in particular, to the study of complex analysis in Cracow, and his teacher, Franciszek Leja.

It should be stressed that many of the current pursuits of Professor Siciak are connected with Franciszek Leja. Both mathematicians were born in the Rzeszów region. Professor Siciak maintains close contacts with the school in Franciszek Leja's hometown of Grodzisko. On some occasions, he visits the Grodzisko school himself or invites teachers and students of this school visit the Jagiellonian University and attend lectures held especially for them.

Shortly before his death, Franciszek Leja endowed a prize to be awarded to outstanding students of mathematics at the Jagiellonian University. From the very outset, Professor Siciak has given his spiritual support to this idea and supplemented it with numerous donations made to augment Professor Leja's bequest. At the time the prize was endowed, Professor Siciak was the Head of the Mathematics Institute at the Jagiellonian University.

This brings us to the third major component of Józef Siciak's mathematical activities. The work of every university faculty member can be divided into three strands: research, teaching and organisational duties. Actually, "divided" is not the best word here, as these areas of activity significantly overlap. Today, one can hardly imagine a mathematician who does not share

his knowledge with others, does not participate in organising conferences or other pursuits for the benefit of science, university or the education system as such. Likewise, teaching is inseparable from research work. Professor Siciak is engaged in all three types of activity with equal dedication and desire for perfection. He simultaneously devotes his time and energy to cutting-edge research, to teaching broad circles of young mathematicians, and to organisational activities at the level of the University and the mathematical community at large.

The Polish Academy of Sciences (PAN) consists of the most eminent Polish scholars. There are less than 20 mathematicians in this group; Józef Siciak was elected PAN corresponding member in 1989 and full member in 1998. He is an academician not only by title, as he takes very active part in the proceedings of the Academy. Currently, he is the Chairman of what can be seen as a “supreme mathematical authority” in Poland: the Mathematics Committee of the PAN. For over 30 years he has also served on the Research Board of the Academy’s Institute of Mathematics.

In 1989, the Polish Academy of Arts and Sciences (PAU), dissolved by the communist authorities in 1956, was re-established in Cracow. In the same year Professor Siciak was elected its member. There, too, his participation is not only in name: he is an Executive Board member of its Class III (comprising Mathematics, Physics and Chemistry) and takes active part in various important activities of the Academy. He does not concentrate solely on academic matters; for instance, he went to great lengths to ensure the appropriate composition of the PAU ad hoc committee reviewing and approving mathematical schoolbooks.

For more than 10 years, Professor Siciak has also held various positions of responsibility within the State Committee for Scientific Research (KBN)—the authority financing research in Poland.

The principal professional organisation of Polish mathematicians is the Polish Mathematical Society (PTM). This is yet another forum on which the Professor has been extremely active. He has performed various functions in the Cracow Division of the Society: those of Secretary, Vice-President, President, Member of the Regional Board, Member of the Audit Committee. He regularly attends the Society’s congresses and conferences and has been a Member of its National Board for many years, holding the post of Vice-President in 1983–1985. For many years, he has also been on the jury awarding the PTM Grand Awards (he was himself a recipient of one of these at an early age, back in 1963).

The number of prestigious distinctions and awards that Professor Siciak has received is truly amazing and it would be hardly possible to enumerate them all here. However, one distinction needs a special mention: in 2001, he received an honorary doctorate from the University of Uppsala—an institu-

tion he has long collaborated with. Since 1988, the Professor has also been a member of the Royal Science Society in Uppsala.

But, of course, he works in the first place for the Jagiellonian University and its Mathematics Institute. His contribution to the University is too manifold and extensive to be discussed exhaustively here. However, this is the right point to give an outline of Professor Siciak's career.

Józef Siciak studied mathematics at the Jagiellonian University in 1950–1955. He took a post at the University in 1954, while still a student. In 1960, he obtained the degree of doctor of mathematical sciences, for his dissertation *Pewne zastosowania metody punktów ekstremalnych (Some applications of the method of extremal points)*, written under the supervision of Franciszek Leja. In his dissertation, he elaborated the method of extremal points and extremal functions in the plane case and extended its applicability to generalised Dirichlet's problem. A revised version of this work was published in *Colloquium Mathematicum* 11 (1964), 209–250. In the academic year 1960/1961, Siciak stayed at Stanford University in the United States as a visiting scholar. He wrote there his habilitation dissertation (the previously mentioned paper on extremal functions), which was published in *Transactions of the American Mathematical Society*. It was clear early on that it was a brilliant piece of research, but it took many years before its importance and theoretical impact became fully appreciated. The Board of the Faculty of Mathematics, Physics and Chemistry, Jagiellonian University, awarded Józef Siciak the degree of habilitated doctor in 1962. In 1972, he became a professor.

Throughout the years at the Jagiellonian University, Józef Siciak has always performed some important tasks—from some seemingly minor, but indispensable chores, like many years of service on the Entrance Examination Board, presiding over the Faculty-level Financial Aid and Student Committees, to the positions of Director of Doctoral Studies in 1969–1978, Chair of Analytic Functions (1964–1970), Chair of Mathematical Analysis (1970–2001), which was the successor to the Chair of Analytic Functions, or the Faculty's representative on the University Senate. In 1977–1981, Professor Siciak was Head of the Mathematics Institute.

Józef Siciak made an excellent department head. He not only carried out his duties efficiently, keeping everything under control, but also introduced many significant innovations. Yet another aspect of his term of office needs to be mentioned: it fell on hard times—a period of a major political upheaval in Poland, when department heads faced various problems, which today's young people might well find more difficult to grasp than many a mathematical theory. Without going into details, it must be emphasised that Professor Siciak handled many difficult situations with utmost competence. He knew how to guard the Department's interests (it was often after many

years that we came to appreciate his foresight fully) and how to be adamant in certain situations, showing exemplary moral courage.

Professor Siciak's role at the Department remains exceptional to this day. There are many issues and decisions which just cannot be tackled without him. His opinions and judgments are sought and respected by everyone, and he never turns a blind eye on the Department's problems, always ready to lend a hand.

In the 1960s, he also taught classes at the Katowice branch of the Jagiellonian University, an organisational unit which subsequently evolved into the Silesian University. Moreover, he combined for about 10 years the work at the Jagiellonian University with the post of scientific consultant at the Institute of Mathematics, Polish Academy of Sciences.

Professor Siciak has often been invited by foreign universities for longer or shorter stays. He has not only attended numerous conferences, but also has organised quite a few himself. In 1979, he was Director of the International Semester of Complex Analysis at the Banach Center in Warsaw.

Which reminds me of another story. On Fridays, when the weekly classes at the Banach Center were over, the Professor would approach his two doctoral students who also took part in the programme and say: "Well, boys, time to go home." And they would drive to Cracow together in the Professor's car. After a few rides the students suggested they would help pay for the fuel. The Professor replied: "To discuss this matter you'd have to hire me first."

More than a decade later I attended a Mathematics History School, held in the Beskid Sądecki Mountains. I set out from Cracow with a friend from the Department. Getting there, as it turned out, was not quite easy. When we told other participants—among them Professor Siciak—on arrival about our adventures on the way, we got a reprimand for not coming with him by car. It was only on telling him we hadn't known he was driving there that we were excused—and immediately offered a ride back home.

Writing about the Professor's activities at the Mathematics Institute of the Jagiellonian University, one must not overlook yet another thing, only seemingly insignificant in comparison with his other pursuits and achievements. For some 35 years, Professor Siciak has been the tutor of the Students' Maths Society of the Jagiellonian University.

The Society, established in 1893, is one of the oldest student organisations at the Jagiellonian University. It is also one of the most active student academic societies. The Society plays an important role, for, regardless of the changing circumstances and the existence of other organisations, it remains the core representation of students at the Mathematics Institute of the Jagiellonian University.

As all the successive generations of students agree, Professor Siciak is an ideal tutor. Never meddling in the students' matters, he lets them freely decide about the numerous pursuits on their own, while keeping a discreet eye on their activities. The students know that, in the event of problems, they can always count on the Professor's assistance, and he takes a keen interest in the Society's activities. He participates in the academic events organised by its members, including even Summer Schools of Mathematics held outside Cracow, and sometimes himself gives a special lecture for the Society. In many cases (although only a handful of students are aware of this) he donated valuable books and journals to the Society's library. Sometimes the Professor makes some tactful suggestion, but never imposes his point of view on the students. Even so, his acceptance of the annual reports of the Academic Society is not a mere formality. Professor Siciak always finds the time to attend the Society's annual general meeting. On one occasion, when an outgoing Board of the Society invited him to the meeting, he asked: "Does it mean a new Board, or just an election?". The Society's Board—and, indeed, its student membership—do indeed change, but all the successive generations invariably seek Professor Siciak's tutorship.

In 1989, the Academic Society of the Students of Mathematics bestowed upon Professor Siciak its honorary membership. There are very few Honorary Members of the Society, therefore, this is a distinction that matters. Normally, it is the Board of the Society which initiates the honorary membership procedure, but in the case of Professor Siciak, this motion was made jointly by the representatives of all the Society Boards from a period of twenty years! The students accepted it unanimously (which was likewise an unusual outcome).

This brings us back to student matters.

After the last lecture came the final exams. In the case of Professor Siciak, this was by no means a formality. The exceptional quality of his lectures went hand in hand with exacting demands placed upon the students. In our first year, we were told that Professor Siciak was a tough examiner. We decided to ask senior students what he was really like, and we were told: "Yes, Siciak is indeed hard to please, but he's got a moral right to demand a lot." This was, as we learned later, a very apt characterisation of an exam taken with Professor Siciak. Indeed, it wasn't easy: one had to know the material really well. But then everything there was to learn had been flawlessly presented during the academic year. If someone was unprepared, it was exclusively his fault. Of course, this did not make everyone happy: those who just wanted to get the credit for the course, without much work (and you find students like that in every group), felt rather distressed.

Any person interpreting Professor Siciak's kindheartedness and benevolence as signs of excessive leniency and overtolerance would be under a

misconception. In fact, he couldn't be more mistaken! As I said, being an exemplary lecturer, he also expects his audience to be punctual, disciplined and well-prepared for the examinations. Punctuality is also required from the participants in his seminars. Professor Siciak specifies the precise responsibilities of the teachers who conduct the seminars supporting his course lectures—and checks the execution of his instructions. He is demanding not only of his students, but also of his collaborators. If someone neglects a duty, mishandles a task or misses a deadline, the Professor does not hesitate to point it out to him or her, but does it in a very friendly manner, often with a witty comment. When the offence is light, the criticism is also expressed in a light, nonstandard form. It is clearly intended to help the person concerned do better in the future.

The Professor has a remarkable ability to mobilise others to perform important tasks or duties. This is a rare gift. He often asks people to do something, but seldom gives orders: rather, he makes requests or just observes that something needs to be done. What is interesting, others are usually glad to be able to comply with his suggestion and help.

Apart from his tactful criticisms, Professor Siciak knows how to bestow praise on others. True, he is not too lavish in his commendations, but this makes them all the more precious. He can please the listener with a few well-chosen words, whether it is about an interesting scientific result, a well-prepared seminar presentation or something else.

Yet another characteristic trait of Professor Siciak needs to be mentioned: his excellent sense of humour. He is famous for his quick repartees. The famous adage by Hugo Steinhaus “Dowcipem nie należy celować, tylko trafiać” which might be very roughly translated as “Don't attempt to be witty: be witty” fits him perfectly. Professor Siciak's wit does indeed hit home. His brief comments are a valuable contribution to every discussion, often provide an excellent punchline or help defuse a tense situation. The Professor's public utterances are often witty, typically brief and invariably significant. When he takes the floor, the audience listens attentively, knowing that something important is going to be said, maybe some conclusion everybody has been trying to reach all along. Admittedly, sometimes these comments are spiced with a touch of irony or even reprimand, but always presented in a benevolent manner, with a friendly smile.

Some examples should be provided here. This is, however, a difficult task. Participants in a seminar, an Institute Board meeting or a Board of Faculty session will often recall: “And then Professor Siciak took the floor and said...” Written down, such stories lose most of their flavour. Too much background information would be needed to recreate the situation and circumstances, so that Professor Siciak's brilliant comment could be fully appreciated. This is probably easier done by word of mouth than in

print. Nevertheless, I will try to recount one or two stories, fully aware of the shortcomings of my narration.

Professor Siciak was the chairman of my doctoral examination board. Towards the end of the exam, one of the members of the board, Professor Andrzej Lasota, had to leave the room for a moment. I had just finished answering one of the questions. Then the chairman inquired whether anybody wanted to ask further questions. When nobody replied, he asked Professor Zbigniew Kowalski, another of the examiners, whether, by any chance, he would like to ask a question. Kowalski replied that indeed there was a question he would like to ask, but he'd rather do it in the presence of Professor Lasota. Professor Siciak demanded: "Why, is it *him* you'd like to question?"

Several weeks later a public discussion was held on my dissertation (defence). When I had presented the summary of its results and the reviewers had read out their reviews, the Chairman of the Board—Professor Siciak again—called upon the audience to ask questions to the candidate. He added that he would ask the first question himself, however, not to me, but to one of the reviewers, Professor Lasota: "In your review you state that the dissertation is beautifully written, which, in your view, exempts you from listing its zero-measure faults. But it is a well-known fact that a zero-measure set can be at the same time dense. I'd like to know how you perceive the shortcomings of this dissertation in this context."

A couple of years ago I had a chance to remind the Professor that he had been lecturing to my year for six semesters and was its tutor. Then he was the chairman of my master's examination board and the Head of the Mathematics Institute who hired me; then again he chaired my doctoral examination board... The Professor asked: "How come you survived all that?"

I would like to recall here the story Professor Siciak told us one day during a lecture, seeing us nod enthusiastically when he had completed some difficult proof. In his student days, he had attended the excellent lectures by Professor Zofia Krygowska, who went to great lengths to make sure her students understood everything. From time to time, student Siciak and a neighbour of his, sitting in the front row, would make a little experiment: They greeted the most difficult fragments of the lecture with enthusiastic nodding; Krygowska was elated and passed on to the next point. But when she talked about something exceptionally easy, they took on a worried, perplexed appearance. Mortified, Krygowska would repeat the whole fragment, sometimes more than once. We liked this story immensely.

One definition equates the sense of humour with the "ability to laugh at oneself". Stories abound about well-known scholars, in particular, mathematicians, and their absent-mindedness. Some of these purportedly refer to concrete persons (although it is not unusual for the same story to be told of

several different protagonists), others feature an archetypal “forgetful mathematician”. The truth of such stories need not concern us here, although some of them are certainly not fabrications. Professor Siciak is not the kind of person who would readily provide anecdote hunters with fresh material confirming the stereotype of an academic with his head in the clouds. With his excellent memory, sound judgment and exceptional conscientiousness, he does not fit the image of the proverbial absent-minded mathematician. But he too has had some memorable moments, which he always took in good humour.

Here’s an example. When I was in my third year, the Professor held lectures in complex analysis for my group, on Fridays at 10.15. On Thursdays, we had a different class in the same room and at the same hour. One Thursday, in came Professor Siciak, ready to start a lecture. Someone said we were waiting for someone else. The Professor asked what day of the week it was, then smiled and said: “Ah, Thursday, not Friday! It means I’m teaching analysis to the first year next door.” He left and headed straight for the adjacent room. We were told afterwards by our younger colleagues that the Professor had had an amused look on his face at the beginning, but the lecture was flawless, as usual. He did not have to rack his brains to remember where he had left off the week before and what he was going to talk about now—he just knew it.

On another occasion, the Professor returned to the lecture room right after his lecture and remarked with a smile: “You don’t open an office with chalk.” Then he picked his office keys from the table, leaving there a piece of chalk he had held all along.

When I’m thinking today about my contacts with Professor Siciak, seen from nearly thirty years’ perspective, I go back to my student days. My year had quite frequent contacts with the Professor, both through his lectures and through the Students’ Maths Society, in which practically all of us were actively involved. And only now came the realisation that somehow we never managed to tell the Professor how we praised, admired and esteemed him. Nothing has changed in this respect since we graduated—either our opinion, or our reticence. Maybe we were too shy? Felt we didn’t dare to? Didn’t have the right opportunity?

Such an opportunity does present itself now. Therefore, I would like—on behalf of myself, my class, and many, many others—to make up for this oversight.

Krzysztof Ciesielski