

IN MEMORIAM

Professor DRAGOSLAV S. MITRINOVIĆ (1908-1995)

On Sunday, 2nd of April 1995, we lost our dear professor, teacher and respectable of numerous generations. Although we knew that he was ill, the news about his death came unexpectedly. We were not yet ready for farewell, as we had admired his vitality and energy and read his new books until recently.

DRAGOSLAV MITRINOVIĆ was born in Smederevo, 23rd of June, 1908. He got his B.Sc in the Group for Mathematics of Philosophical faculty in Belgrade, as a student of MIHAILO PETROVIĆ - ALAS. Next year, in October of 1933, he defended his Ph. D. thesis entitled "Researches on an important differential equation of the first order". Until the year 1946, MITRINOVIĆ served as a secondary school teacher; in this period he published about 50 scientific papers. Next five years he spent in Skopje, Macedonia, where he founded the Chair for Mathematics at the Philosophical Faculty. Thanks to him, the journal "Zbornik radova Filozofskog fakulteta u Skoplju" was founded in 1948, and "Bilten društva matematičara i fizičara Makedonije" in 1950. Also in that time, due to his endeavours, the University printing house was founded in Skopje. It was specialized in mathematical typesetting and it furnished the first mathematical texts in Macedonian language. From that time till the lead and old printing technology gradually dissapeared, Professor MITRINOVIĆ made friends with typesetters and in his books he often used to acknowledge their share in making the hard-to-typesett mathematical texts.

Professor MITRINOVIĆ moved to Belgrade in 1951, where he became a professor at the Faculty of Electrical Engineering. He was elected the Chair of Mathematics in 1953, a position in which he remained untill shortly before his retirement in 1978.

His first scientific paper, devoted to differential equations, appeared in 1933. According to his bibliography in the last year issue of our Publications, his 430th title is the book on polynomials, published last year in Singapoore, with co-authors G. V. MILOVANOVIĆ and T. M. RASSIAS. In the same issue of Publications, in

the Problem Section, his problem was published, one of several problems that he gave me three years ago, when the Problem Section was established, which I kept as little preciousnesses for each issue.

When he retired, he confided to his collaborators that he feared he would not have enough time to complete all his projects. In that period, from 1979 till 1994, he published 116 titles. Let us mention only some of books published abroad in the period after retirement: Cauchy method of residues (1984, jointly with J. D. KEČKIĆ), Means and their inequalities (1988, jointly with P. S. BULLEN and P. M. VASIĆ), Recent advances in Geometric inequalities (1989, jointly with J. E PEČARIĆ and V. VOLONEC), Inequalities involving functions and their integrals and derivatives (1991, jointly with J. E. PEČARIĆ and M. FINK), Classical and new inequalities (1993, jointly with PEČARIĆ and FINK), Topics in polynomials (1994, jointly with G. V. MILOVANOVIĆ and T. M. RASSIAS).

Out of his impressive product, it is not easy to select a particular paper or a book. Maybe the most of mathematicians know Professor MITRINOVIĆ by his book Analytic Inequalities (1970, in cooperation with PETAR VASIĆ), that had a great impact to the development of research in these topics.

The harsh circumstances under which he lived and worked either in time when he was a school teacher or later, could not break his devotion to the scientific work. He urged his collaborators to work hard as well as he practiced himself. With younger collaborators he behaved like a stern, but worried father: he asked much, but he used to give much too, supervised and fought for success of each of his collaborators and provided conditions for their research in international mathematical centers.

As a young mathematician he published his papers in the world's most prominent journals. Let us mention only *Comptes rendus* of France Academy of sciences, on whose pages had contributed even CAUCHY and most of leading mathematicians of the world. MITRINOVIĆ published his first paper in this journal at the age of 29.

Since he founded *Publications of the Faculty of Electrical Engineering, Series: Mathematics and Physics*, he used to publish almost all of his papers there. Soon after the commencement, the *Publications* gained a worldwide renown in the areas of inequalities and functional equations. Many outstanding mathematicians from all over the world had published their papers in our *Publications* at MITRINOVIĆ's time.

MITRINOVIĆ's work with students will be long remembered. As well as with his collaborators, he appreciated any small contribution of each of his students and tried to encourage them to proceed with research. He used to publish every outstanding or original solution of mathematical problems produced by a student, in the next edition of his problem books, accompanied by the student's name.

His lectures were interesting and often spiced by details from lives of famous mathematicians, aiming to make students interested in mathematics. His enthusiasm passed to his collaborators, too. Not rarely undergraduate students of Electrical Engineering published papers in Mathematics, even only after the first year. A number of students made a career in Mathematics, rather than in Elec-

trical Engineering. After an initiative by MITRINOVIĆ, a so called Special Group in Mathematics was founded in 1972, and with occasional interrupts it has been functioning till now. The role of the Special Group is to enable interested students to study more Mathematics than at regular classes; this group is a place where prospective young mathematicians can be recruited.

The generations of students and mathematicians studied from the textbooks and problem books of Professor MITRINOVIĆ. His name on the cover (he always used to sign as D. S. MITRINOVIĆ) meant high standards, a rigorous mathematical style and new original problems.

Scientific work of Professor MITRINOVIĆ and his contributions to Mathematics are divided to several areas: Differential equations, Inequalities, Functional equations, Number theory, Complex functions and Special functions. However, his knowledge of different areas of Mathematics was fascinating. His collaborators were frequently surprised by his familiarity with references in topics that were not in his immediate circle of interest. In his last years, he used to give whole folders of precious papers to his visitors as a present, saying: I do not have any more time for that.

The works of Professor MITRINOVIĆ will be long remembered and quoted in our and world's mathematical literature. In the memories of his numerous collaborators, doctorands and students, a trully exceptional man will remain. The light that he carried has not extinguished by his departure; we who were honored by knowing him will carry it further.

Milan Merkle

Poštovana porodice profesora MITRINOVIĆa,
Poštovane kolegice i kolege,

Dozvolite mi da u ovom tužnom trenutku rastanka sa uvažnim profesorom istaknem samo neke karakteristične detalje iz njegovog bogatog opusa. Prigodni kratki govori u ovakvim prilikama mogu samo grubo da skiciraju ono što je takav naučnik, kao što je bio profesor DRAGOSLAV S. MITRINOVIĆ, uradio za vreme svoje višedecenijske plodne delatnosti, a pred istoričarima naše nauke je zadatak da njegov život i delo opišu i trajne vrednosti i poruke iz tog dela sačuvaju za naredna pokolenja.

Doktorat 1933. godine u 25-toj godini života kod velikana naše nauke MIHAILA PETROVIĆA-ALASA nagovestio je već tada blistavu naučnu karijeru mladog MITRINOVIĆa. Zaista, profesor MITRINOVIĆ je u mnogobrojnim publikovanim radovima dao značajne doprinose u oblasti diferencijalnih jednačina, funkcionalnih jednačina, analitičkih nejednakosti i u drugim oblasti matematike.

Zbirka zadataka koju je MITRINOVIĆ objavio ranih tridesetih godina bila je preteča njegovih čuvenih zbornika matematičkih problema iz pedesetih i šezdesetih

godina. Ovi zbornici su bili značajan faktor održavanja visikog nivoa nastave matematike na našem fakultetu i izvanredno sredstvo za širenje matematičkih ideja i za uvođenje mladih u naučni rad. Uticaj tih zbornika doseže do današnjih dana.

Počevši od pedesetih godina profesor MITRINOVIĆ je uređivao Publikacije Elektrotehničkog fakulteta–Serija matematika i fizika, i u razdoblju od nekoliko decenija održavao visoke internacionalne standarde u selekciji publikovanog materijala uz bogatu razmenu publikacija sa više stotina centara u svetu i učesće inostranih kolega među autorima i u recenzentskom timu. Bio je počasni urednik nove serije Publikacija Elektrotehničkog fakulteta pod nazivom Matematika, a sadašnje uredništvo dobija povremeno pisma sa referencama na profesora MITRINOVIĆa. Između ostalog, poznati makedonski matematičar DRAGAN DIMITROVSKI je pisao da su Publikacije iz MITRINOVIĆevog vremena bile doprinos civilizaciji na ovim prostorima.

U vezi sa Publikacijama značajna je i delatnost MITRINOVIĆa na formiranju i unapređenju matematičke biblioteke koja poseduje mnoge unikatne knjige i časopise u našoj zemlji. Nažalost, nešto zbog sadašnjih sankcija kojima smo izloženi, a više zbog naših internih razloga, priliv i bibliotečka obrada dragocenih izvora naučnih informacija su znatno umanjeni.

U poslednjem broju Publikacija Elektrotehničkog fakulteta, serija matematika, objavljen je četvrti deo bibliografije radova profesora MITRINOVIĆa. Poslednja, 430–ta, bibliografska jedinica predstavlja naučnu monografiju: *Topics in polynomials: Extremal problems, inequalities, zeroes*, koju je MITRINOVIĆ zajedno sa GRADIMIROM MILOVANOVIĆem i T. M. RASSIASom objavio u Singapuru 1994. godine. Ovo impozantno naučno delo sadrži 820 strana i predstavlja samo jednu od značajnih monografija koje je MITRINOVIĆ objavio kod inostranih izdavača.

Nekoliko desetina doktorskih disertacija (oko 50) kojima je rukovodio MITRINOVIĆ šezdesetih i sedamdesetih godina imalo je snažan uticaj na razvoj naše nauke. Pored visokog kvaliteta velikog broja ovih disertacija, one su, u vreme kada su doktorati bili relativno retki, katalizatorski uticale na formiranje i otvaranje drugih naučnih centara i to ne samo u okviru matematike.

MITRINOVIĆ je bio veliki reformator i inovator nastave matematike. Danas može da izgleda čudno da smo mi koji smo studirali pedesetih i šezdesetih godina slušali kod MITRINOVIĆa elemente teorije skupova tek na trećoj godini studija (i to samo studenti na Odseku za tehničku fiziku) jer se danas, naravno, dobar deo toga predaje u osnovnoj školi. Međutim, MITRINOVIĆ je pričao jednom prilikom da je koristeći ovlašćenja šefa katedre morao u pismenom obliku da nalaže pojedinim nastavnicima da predaju matrice, elemente matematičke logike i druge danas sasvim standardne delove matematičkog obrazovanja inženjera.

Na kraju spomenuo bih jednu interesantnu sugestiju profesora MITRINOVIĆa koju je uputio asistentima katedre na jednom sastanku. On se založio da asistenti obrađujući xxxxx naučne probleme što pre publikuju radove, izlažući se, naravno, odgovarajućoj kritici u postupku recenzije. Ako je za rešenje jednog problema, tj. publikovanje rada, potrebno proučiti i deset obimnih knjiga, to treba uraditi, ali je istovremeno bio skeptičan u pogledu proučavanja literature bez cilja u is-

traživanjima.

Slava i hvala profesoru MITRINOVIĆU.

(D. CVETKOVIĆ: Reč na komemorativnoj sednici Elektrotehničkog fakulteta u Beogradu, 4. 4. 1995).

I mourn for the death of Professor D. S. MITRINOVIĆ. He was outstanding mathematician and person. He was an advocate of international scientists cooperation.

Lev. M. Berkovich

I was saddened by the news of the passing of Professor D. S. MITRINOVIĆ. He was a major figure in a number of fields.

Ingram Olkin