Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

SLOVENSKÁ TECHNICKÁ UNIVERZITA V BRATISLAVE
Fakulta chemickej a potravinárskej technológie

SUMÁRNY PREHĽAD PEDAGOGICKEJ A VEDECKOVÝSKUMNEJ ČINNOSTI K ŽIADOSTI NA HABILITAČNÉ KONANIE ZA DOCENTA ALEBO NA VYMENÚVACIE KONANIE ZA PROFESORA

v odbore habilitačného konania *Automatizácia*

Meno a priezvisko:	**Ľuboš Čirka**
Narodený (dátum a miesto):	XX.XX.1972, Nitra
Akademické a vedecké hodnosti (titul a rok získania):	*PhD*. (2003), *Ing*. (1996)
Funkčné zaradenie:	pedagogický pracovník
Pracovisko:	Ústav informatizácie, automatizácie a matematiky, Fakulta chemickej a potravinárskej technológie, STU v Bratislave
Priebeh zamestnania:	1999 – doteraz: *Pedagogický pracovník* na Ústave informatizácie, automatizácie a matematiky, FCHPT, STU v BA 1996 – 1999: *Študent denného PhD štúdia* na Ústave informatizácie, automatizácie a matematiky, FCHPT, STU v BA

1) Pedagogická činnosť

1.1. Prednášky (predmet, obdobie – akademické roky od-do, rozsah – počet semestrov a počet hodín týždenne)
Vybrané kapitoly z prednášok:

Predmet	Obdobie	Počet semestrov	Počet hodín za týždeň	Počet prednášok za semester

Informatizácia a informačné systémy	2015/2016 - 2018/2019	4	1	13
Informatizácia a priemyselné informačné systémy II	2019/2020 - 2020/2021	2	2	13
Matlab - pokročilé techniky	2017/2018	1	1	13
Programovanie webových aplikácií I	2021/2022 - 2022/2023	2	1	13
Programovanie webových aplikácií II	2021/2022	1	2	4
Programovanie webových aplikácií	2015/2016 - 2020/2021	6	1	13
Úvod do technológie XML	2019/2020	1	1	13
Webové technológie I	2022/2023	1	1	13
Webové technológie II	2021/2022 - 2022/2023	2	1	13

1.2. Semináre a laboratórne cvičenia (predmet, obdobie – akademické roky od-do, rozsah – počet semestrov a počet hodín týždenne)

Predmet	Obdobie	Počet semestrov	Počet hodín za týždeň
Identifikácia	2015/2016 - 2019/2020	5	2
Informačné	2015/2016	4	2

technológie I	- 2018/2019		
Informačné technológie II	2015/2016 - 2017/2018	3	2
Informatika I	2021/2022	1	2
Informatizácia a informačné systémy	2015/2016 - 2018/2019	4	2
Informatizácia a priemyselné informačné systémy II	2019/2020 2020/2021	2	2
Internetové a informačné systémy	2015/2016 - 2022/2023	8	2
Matlab - pokročilé techniky	2017/2018	1	1
Programovanie webových aplikácií I	2021/2022 2022/2023	2	2
Programovanie webových aplikácií II	2021/2022 2022/2023	2	2
Programovanie webových aplikácií	2015/2016 - 2020/2021	6	2
Tabuľkové a databázové systémy pre spracovanie údajov	2015/2016 - 2022/2023	8	2
Teória automatického riadenia II	2020/2021	1	3
Úvod do technológie XML	2019/2020	1	1

Webové technológie I	2022/2023	1	3
Webové technológie II	2021/2022 2022/2023	2	3
Webové technológie v automatizácii	2015/2016 - 2020/2021	5	2
Základy Matlabu	2015/2016 - 2018/2019	4	2

1.3. Vedenie doktorandov resp. ašpirantov:
– počet vyškolených: **0**
– počet súčasne školených: **0** (po dizertačnej skúške)

Obdobie	Študent	Názov práce

1.4. Vedenie záverečných diplomových prác - **počet: 33** z toho 1 v anglickom jazyku

Obdobie	Študent	Názov práce
2023	Matej Hatványi	Návrh a implementácia Informačného systému ÚIAM v Laraveli – moduly pre pedagogiku
2022	Denisa Chowaniecová	Návrh a implementácia Informačného systému ŠVK v Laraveli
2022	Michaela Vogl	Návrh a implementácia Informačného systému ÚIAM v Laraveli – moduly pre vedu a výskum
2021	Peter Szedlák	Design and Implementation of Mobile Applications (práca napísaná aj obhájená v angličtine)
2021	Jozef Štofa	Návrh a implementácia webového portálu Chemical Papers
2019	Jakub Nosko	Štatistická analýza dát v programovacom jazyku R
2016	Martin Krippel	Informačný systém ÚIAM
2016	Nikola Míková	Navrhovanie simulinkovej schémy cez Internet
2013	Katarína Bugárová	Tvorba knižnice modelov technologických procesov

2013	Rastislav Jenčík	Internetový modul pre modelovanie a simuláciu procesov
2013	Juraj Malinič	Internetový modul pre modelovanie a simuláciu procesov
2011	Pavel Bodnár	Tvorba aplikácií pre virtuálne laboratórium
2011	Dávid Dubovský	Tvorba webovej aplikácie s využitím MVP frameworku Nette
2011	Dávid Schmidt	Využitie MATLAB Builder JA na tvorbu virtuálneho laboratória
2010	Veronika Csizmadiaová	Spojité riadenie laboratórneho zariadenia PCT40
2010	Martin Kalúz	Virtuálne laboratórium
2010	Jozef Krivák	Ohlasy - modul pre informačný systém ÚIAM
2010	Jaroslav Kuzma	Publikácie - modul pre informačný systém ÚIAM
2010	Jana Kmeťová	CONFIS - konferenčný informačný systém
2010	Andrea Szabová	Diskrétne riadenie laboratórneho zariadenia PCT40
2010	Lenka Vlková	Virtuálne laboratórium
2009	Róbert Lanák	Dovolenkový modul pre webový systém ÚIAM
2009	Martin Zubček	Systém na správu protetických výkonov
2008	Peter Šlapanský	Informačný systém pre sklad motorových palív v Oktan a.s. Kežmarok
2007	Pavel Dováľ	E--learningový internetový modul pre experimentálnu identifikáciu
2007	Eva Juhásová	Learningový modul pre termofluidný proces
2006	Peter Petruš	Identifikačný toolbox pre MATLAB/Simulink
2006	Barbora Šátková	E–learningový internetový modul pre Laboratórne cvičenia zo základov automatizácie
2005	Tibor Prček	Monitorovanie a riadenie výmenníka tepla LTR 700 s využitím Internetu
2005	Katarína	Tvorba e-learningovej učebnice: Návrhy regulátorov

	Rybárová	
2005	Jana Závacká	Tvorba e–learningovej učebnice: Modelovanie technologických procesov
2004	Michal Lehocký	Tvorba informačného systému publikácií
2004	Dalibor Puna	Tvorba informačného systému Katedry informatizácie a riadenia procesov

1.5. Vedenie záverečných bakalárskych prác - **počet: 19**

Obdobie	Študent	Názov práce
2020	Denisa Chowaniecová	Webová aplikácia na vkladanie a spracovanie údajov
2018	Barbora Bačíková	Tvorba dynamických webových stránok
2017	Jakub Nosko	Tvorba portálu ŠVK
2015	Katarína Kirová	Tvorba knižnice modelov technologických procesov
2015	Martin Šimek	Tvorba web stránok ŠVK v redakčnom systéme Drupal
2014	Nikola Míková	Internetová verzia toolboxu PIDDESIGN
2014	Igor Stupavský	Webový portál Slovenskej spoločnosti priemyselnej chémie
2013	Michal Kleščík	Flash prezentácie pre predmet Informatizácia a informačné systémy
2012	Martin Franc	Web modul na spracovanie a analýzu údajov v informačnom systéme ÚIAM
2012	Viktor Kukla	Flash prezentácie pre predmet Identifikácia
2012	Ján Uhrinovský	Export údajov z informačného systému ÚIAM
2011	Juraj Malinič	Dynamické webové stránky VŠC v Humennom
2009	Pavel Bodnár	Dynamické generovanie obrázkov vo formáte SVG
2009	Dávid Dubovský	Generovanie prechodových charakteristík s využitím technológie AJAX
2009	Stanislav Kušev	Tvorba webových stránok
2008	Richard Dvoran	Tvorba dynamických webových stránok

2008	Martin Kalúz	Elektronická učebnica pre predmet Experimentálna identifikácia
2008	Jana Kmeťová	Web aplikácia na spracovanie a analýzu údajov
2008	Lenka Vlková	Elektronická učebnica pre predmet Informatizácia a informačné systémy

1.6. Vedenie študentov v rámci ŠVOČ (počet, príp. umiestnenie vo fakultnom, resp. bývalom celoštátnom kole): **4** (1. miesto FCHPT (1))
1.7. VŠ učebnice (kategória **ACA**, **ACB**, **ACC** a **ACD**) - **počet: 1**
1.8. Skriptá (kategória **BCI** a **BCK**) - **počet: 1**

2) Publikačná a iná vedecká aktivita (uviesť počty)
(Zoznam publikačnej činnosti sa spracováva podľa Vyhlášky č. 456/2012 MŠVVaŠ o centrálnom registri evidencie publikačnej činnosti a centrálnom registri evidencie umeleckej činnosti – **pri všetkých kolektívnych prácach uviesť podiel uchádzača v percentách.***)*

2.1. Pôvodné vedecké práce v zahraničných a domácich karentovaných (CC) časopisoch (kategória **ADC** a **ADD**) - **počet**: **13**
z toho ako 1. autor - **počet**: **1**
2.2. Pôvodné vedecké práce v zahraničných a domácich časopisoch registrovaných v databázach Web of Science alebo SCOPUS (kategória **ADM** a **ADN**) - **počet**: **1**
2.3. Pôvodné vedecké práce v ostatných zahraničných a domácich časopisoch (kategória **ADE** a **ADF**) - **počet**: **11**
2.4. Pôvodné vedecké práce v zahraničných a domácich recenzovaných **nekonferenčných** zborníkoch, monografiách (kategória **AEC** a **AED**) - **počet**: **20**
2.5. Publikované **pozvané** príspevky v zborníkoch zo zahraničných a domácich vedeckých konferencií **(v zozname uvádzať aj ISBN) (**kategória **AFA** a **AFB)**:
vo svetovom jazyku[x/] - **počet**: **0** z toho s ISBN - **počet**: **0**
v národnom jazyku - **počet**: **0** z toho s ISBN - **počet**: **0**
2.6. Publikované príspevky v zborníkoch zo zahraničných a domácich vedeckých konferencií **(v zozname uvádzať aj ISBN) (**kategória **AFC** a **AFD)**:
vo svetovom jazyku[x/] - **počet**: **103** z toho s ISBN - **počet**: **69**
v národnom jazyku - **počet**: **9** z toho s ISBN - **počet**: **3**
2.7. Patentové prihlášky, prihlášky úžitkových vzorov, prihlášky ochranných známok a pod. (kategória **AGJ**) - **počet: 0**
2.8. Abstrakty vedeckých prác v zahraničných a domácich karentovaných časopisoch a časopisoch registrovaných v databázach Web of Science alebo SCOPUS (kategória **AEG, AEH a AEM, AEN)** - **počet**: **0**

2.9. Abstrakty pozvaných a ostatných príspevkov zo zahraničných a domácich vedeckých konferencií, ktoré vyšli v konferenčnom zborníku **(v zozname uvádzať aj ISBN)** (kategória **AFE, AFF a AFG, AFH)** - **počet**: **6**
vo svetovom jazyku[x/] - **počet**: **2** z toho s ISBN - **počet**: **1**
v národnom jazyku - **počet**: **2** z toho s ISBN - **počet**: **2**

2.10. Postery zo zahraničných a domácich vedeckých konferencií (kategória **AFK** a **AFL**) - **počet**:
z toho: – zahraničných[xxx/] - **počet**: **0** – domácich - **počet**: **0**

2.11. Monografie a kapitoly v monografiách[xx/] (kategória **AAA, AAB, ABA, ABB, ABC, ABD**):
vo svetovom jazyku[x/] - **počet AH**: **0**
v národnom jazyku - **počet AH**: **0**

2.12. Prednášky na zahraničných vedeckých podujatiach[xxx] **(v zozname vyznačte osobne prednesené) – počet: 28**
z toho: - osobne prednesené pozvané prednášky - **počet: 0**
- osobne prednesené prihlásené prednášky - **počet**: **2**

2.13. Prednášky na domácich vedeckých podujatiach **(v zozname vyznačte osobne prednesené) – počet**: **25**
z toho osobne prednesené - **počet**: **5**

2.14. Získané finančné prostriedky v € (**uvádza iba zodpovedný riešiteľ**):
Granty:
- VEGA: 0
- APVV: 0
- ŠPVaV: 0
- Iné (napr. aplikovaný výskum MŠVVaŠ SR, finančný príspevok MŠVVaŠ SR na medzinárodné projekty a pod.): 0

Mimorozpočtové zdroje:
- medzinárodné projekty: 0
- ZoD: 0

2.15. Citácie (**počty**):
- SCI: **109** (podľa WOS bez autocitácií, len časopisecké citácie)
- knižné: 0
- iné: **66** (podľa WOS bez autocitácií)

(Zoznam citácií sa spracováva podľa *Vyhlášky č. 456/2012 MŠVVaŠ o centrálnom registri evidencie publikačnej činnosti a centrálnom registri evidencie umeleckej činnosti.*)

Dátum: 11.9.2023

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

…… ……
…
prof. Ing. Miroslav Fikar, DrSc. podpis uchádzača
riaditeľ
Ústav informatizácie, automatizácie a matematiky

[x/] Za svetový jazyk sa považuje angličtina, nemčina, francúzština, španielčina, ruština
[xx/] Pre monografiu platí rozsah minimálne 3 AH, pre kapitolu v monografii najmenej 1AH (1 AH=20 normalizovaných strán, 1 normalizovaná strana=1800 znakov)

[xxx/] ČR sa považuje za zahraničie od 1.1.1993

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

Minimálne kritériá na získanie titulu docent a titulu profesor
na Slovenskej technickej univerzite v Bratislave
Odbor habilitačného a inauguračného konania: **Automatizácia**

Schválené vo VR STU 22. 02. 2021

Minimálne povinné požiadavky	**Požadované minimálne hodnoty**		**Skutočné**
	Prof.	**Doc.**	
I. Vzdelávacia činnosť a tvorba študijných materiálov	3 roky po doc.	3 roky po PhD.	20 rokov po PhD.
Vzdelávacia činnosť v rozsahu:	1 (3 AH)	-	-
Vysokoškolská učebnica alebo učebný text, skriptá (uvádza sa autorský podiel uchádzača):	2x (3 AH)	1 (3 AH)	1 (3 AH)
Záverečné práce obhájené pod vedením uchádzača:	15	8	52
II. Vedeckovýskumná alebo tvorivá umelecká aktivita[*)]			
Výstupy v kategóriách A+, A, A- a B	40 (10)	20 (5)	69 (10)
z toho výstupy v kategóriách A+ a A:	6 (3)	3 (2)	19 (8)
III: Ohlasy na publikačnú alebo umeleckú aktivitu[*)]	40 (12)	20 (8)	175 (136)
Ohlasy spolu			
z toho: Ohlasy registrované vo WoS alebo SCOPUS:	20 (10)	10 (3)	175 (136)
IV. Vedecká škola			
Výchova doktorandov:	2	-	-
(skončený/po dizertačnej skúške):	1/1	-	-
Účastník/vedúci výskumného alebo umeleckého projektu:	3/1	2/0	26/0
V. Doplňujúce kritériá[**)]			

[*)] V zátvorke uviesť počty za posledných 5 rokov.
[**)] Doplňujúce kritériá určia vedecké rady fakúlt ohľadom na špecifiká odboru HaI konania.

Kategorizácia výstupov:

A+	publikácia v časopise Q1 alebo Q2 (WoS, alebo SCOPUS), monografia alebo kapitola v MRV, publikácie vo WoS alebo SCOPUS[1)], medzinárodný patent
A	publikácia v časopise Q3 alebo Q4[3)], ostatné publikácie vo WoS alebo SCOPUS[2)], publikačný výstup

	zo svetového kongresu (vedecká práca v recenzovanom zborníku svetového kongresu registrovanom v databáze WoS alebo SCOPUS, vydanom celosvetovo uznávanými inštitúciami IFAC, IFIP, IEEE, ACM, IET, SPIE, IACM, ECCOMAS), vedecká monografia alebo kapitola v monografii vo svetovom jazyku vydaná v zahraničnom vydavateľstve nezaradená v A+
A-	ostatné publikácie vo WoS alebo SCOPUS, vedecká monografia alebo kapitola v monografii vo svetovom jazyku vydaná v domácom vydavateľstve, národný patent
B	ostatné recenzované publikácie v časopisoch alebo v zborníkoch z medzinárodnej konferencie, úžitkový vzor

Akceptuje sa zaradenie časopisu do kvartilov podľa WoS alebo SCOPUS.
MRV - medzinárodné renomované vydavateľstvo (zoznam STU)
[1)] aspoň 10 citácií (bez autocitácií) vo WoS alebo SCOPUS
[2)] aspoň 5 citácií (bez autocitácií) vo WoS alebo SCOPUS
[3)] časopis Q4 (Wos alebo SCOPUS) s IF > 0,4

V. Doplňujúce kritériá

Požadované minimálne hodnoty

- Prof.: plniť na 75%
- Doc.: Plniť na 50%
- Skutočnosť: **50%** (8/16)

	Splnené
Publikácie v domácich a zahraničných vedeckých časopisoch	x
Garant študijného odboru alebo programu	
Členstvo vo vedeckej rade fakulty, univerzity alebo výskumného ústavu	
Prednáškové pobyty v zahraničí	
Členstvo v celoštátnej profesijnej organizácii	x
Členstvo v medzinárodnej profesijnej organizácii	x
Členstvo v komisiách pre štátne skúšky na III. stupni štúdia	
Prednášky na domácich vedeckých konferenciách	x
Prednášky na zahraničných vedeckých konferenciách	x
Členstvo v redakčnej rade časopisu	
Posudzovateľ projektov z grantových agentúr	
Posudzovateľ článkov v časopisoch, dizertačných a habilitačných prác	
Vedenie prác ŠVOČ	x
Tvorba študijných pomôcok	x
Expertízne posudky v odbore	
Ostatné aktivity a ocenenia relevantné pre odbor	x

Profesijný životopis

Meno a priezvisko, rodné priezvisko, akademický titul, vedecko-pedagogický titul, umelecko-pedagogický titul, vedecká hodnosť	**Ľuboš Čirka** PhD. (2003), Ing. (1996)
Dátum a miesto narodenia	XX.XX.1972, Nitra
Vysokoškolské vzdelanie a ďalší akademický rast	2003 - PhD. v odbore *Riadenie procesov* Fakulta Chemickej a Potravinárskej Technológie, STU v BA 1996 – Ing. v odbore *Automatizácia*, Fakulta elektrotechniky a informatiky, STU v BA
Ďalšie vzdelávanie	1997/05 – 1997/08 – študijný pobyt na *Technological Educational Institute of Athens*
Priebeh zamestnaní	1999 – doteraz: *Pedagogický pracovník na Ústave informatizácie, automatizácie a matematiky*, FCHPT, STU v BA
Priebeh pedagogickej činnosti (pracovisko/predmety)	Všetky pedagogické aktivity boli realizované na FCHPT, STU v BA: • Identifikácia: 2015/2016-2019/2020 • Informačné technológie I: 2015/2016-2018/2019 • Informačné technológie II: 2015/2016-2017/2018 • Informatika I: 2021/2022 • Informatizácia a informačné systémy: 2015/2016-2018/2019 • Informatizácia a priemyselné informačné systémy II: 2019/2020, 2020/2021 • Internetové a informačné systémy: 2015/2016-2022/2023 • Matlab - pokročilé techniky: 2017/2018 • Programovanie webových aplikácií: 2015/2016-2020/2021 • Programovanie webových aplikácií I: 2021/2022, 2022/2023 • Programovanie webových aplikácií II: 2021/2022, 2022/2023 • Tabuľkové a databázové systémy pre spracovanie údajov: 2015/2016-2022/2023 • Teória automatického riadenia II: 2020/2021 • Úvod do technológie XML: 2019/2020 • Webové technológie I: 2022/2023 • Webové technológie II: 2021/2022-2022/2023 • Webové technológie v automatizácii: 2015/2016-2020/2021

	• Základy Matlabu: 2015/2016-2018/2019
Odborné alebo umelecké zameranie	Riadenie procesov, automatizácia, kybernetika
Publikačná činnosť vrátane rozsahu (autorské hárky) a kategórie evidencie (napr. AAB,...) podľa vyhlášky MŠVVaŠ SR č. 456/2012 Z. z. 1. monografia 2. učebnica 3. skriptá	• ABD, Kapitoly vo vedeckých monografiách vydané v domácich vydavateľstvách, Počet: 1 • ACB, Vysokoškolské učebnice vydané v domácich vydavateľstvách, Počet: 1 • ADC, Vedecké práce v zahraničných karentovaných časopisoch, Počet: 10 • ADD, Vedecké práce v domácich karentovaných časopisoch, Počet: 3 • ADE, Vedecké práce v ostatných zahraničných časopisoch, Počet: 2 • ADF, Vedecké práce v ostatných domácich časopisoch, Počet: 9 • ADN, Vedecké práce v domácich časopisoch registrovaných v databázach Web of Science alebo SCOPUS, Počet: 1 • AEC, Vedecké práce v zahraničných recenzovaných vedeckých zborníkoch, monografiách, Počet: 6 • AED, Vedecké práce v domácich recenzovaných vedeckých zborníkoch, monografiách, Počet: 14 • AFC, Publikované príspevky na zahraničných vedeckých konferenciách, Počet: 50 • AFD, Publikované príspevky na domácich vedeckých konferenciách, Počet: 62 • AFG, Abstrakty príspevkov zo zahraničných vedeckých konferencií, Počet: 3 • AFH, Abstrakty príspevkov z domácich vedeckých konferencií, Počet: 1 • BAB, Odborné knižné publikácie vydané v domácich vydavateľstvách, Počet: 1 • BCI, Skriptá a učebné texty, Počet: 1 • BEE, Odborné práce v zahraničných zborníkoch (konferenčných aj nekonferenčných), Počet: 1 • BFB Abstrakty odborných prác z domácich podujatí (konferencie...), Počet: 1 • FAI, Zostavovateľské práce knižného charakteru (bibliografie, encyklopédie, katalógy, slovníky, zborníky, atlasy...), Počet: 1 • GAI, Správy, Počet: 2

Ohlasy na vedeckú / umeleckú prácu	Citácie WOS (bez autocitácií)/H-index: **175/8**
Počet doktorandov: školených ukončených (neplatí pre habilitačné konanie)	
Ďalšie vedecko-výskumné aktivity	-
Kontaktná adresa	lubos.cirka@stuba.sk Ústav informatizácie, automatizácie a matematiky FCHPT STU v Bratislave Radlinského 9, 81237 Bratislava

V Bratislave dňa 13.9.2023

Podpis
uchádzača

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

Prehľad pedagogickej činnosti

1 Vybrané kapitoly z prednášok

Predmet	Obdobie	Počet semestrov	Počet hodín za týždeň	Počet prednášok za semester
Informatizácia a informačné systémy	2015/2016 - 2018/2019	4	1	13
Informatizácia a priemyselné informačné systémy II	2019/2020 - 2020/2021	2	2	13
Matlab - pokročilé techniky	2017/2018	1	1	13
Programovanie webových aplikácií I	2021/2022 - 2022/2023	2	1	13
Programovanie webových aplikácií II	2021/2022	1	2	4
Programovanie webových aplikácií	2015/2016 - 2020/2021	6	1	13
Úvod do technológie XML	2019/2020 - 2019/2020	1	1	13
Webové technológie I	2022/2023	1	1	13
Webové technológie II	2021/2022 - 2022/2023	2	1	13

2 Semináre, cvičenia, laboratórne cvičenia

Predmet	Obdobie	Počet semestrov	Počet hodín za týždeň
Identifikácia	2015/2016 - 2019/2020	5	2
Informačné technológie I	2015/2016 - 2018/2019	4	2
Informačné technológie II	2015/2016 - 2017/2018	3	2
Informatika I	2021/2022	1	2
Informatizácia a informačné systémy	2015/2016 - 2018/2019	4	2
Informatizácia a priemyselné informačné systémy II	2019/2020 - 2020/2021	2	2
Internetové a informačné systémy	2015/2016 - 2022/2023	8	2
Matlab - pokročilé techniky	2017/2018	1	1
Programovanie webových aplikácií I	2021/2022 - 2022/2023	2	2
Programovanie webových aplikácií II	2021/2022 - 2022/2023	2	2

Programovanie webových aplikácií	2015/2016 - 2020/2021	6	2
Tabuľkové a databázové systémy pre spracovanie údajov	2015/2016 - 2022/2023	8	2
Teória automatického riadenia II	2020/2021	1	3
Úvod do technológie XML	2019/2020	1	1
Webové technológie I	2022/2023	1	3
Webové technológie II	2021/2022 - 2022/2023	2	3
Webové technológie v automatizácii	2015/2016 - 2020/2021	6	2
Základy Matlabu	2015/2016 - 2018/2019	4	2

3 Vedenie študentov

3.1 Doktorandi

Obdobie	Študent	Názov práce

3.2 Diplomanti

Vedenie záverečných diplomových prác - **počet: 33** z toho 1 v anglickom jazyku

Obdobie	Študent	Názov práce
2023	Matej Hatványi	Návrh a implementácia Informačného systému ÚIAM v Laraveli – moduly pre pedagogiku

2022	Denisa Chowaniecová	Návrh a implementácia Informačného systému ŠVK v Laraveli
2022	Michaela Vogl	Návrh a implementácia Informačného systému ÚIAM v Laraveli – moduly pre vedu a výskum
2021	Peter Szedlák	Design and Implementation of Mobile Applications (práca napísaná aj obhájená v angličtine)
2021	Jozef Štofa	Návrh a implementácia webového portálu Chemical Papers
2019	Jakub Nosko	Štatistická analýza dát v programovacom jazyku R
2016	Martin Krippel	Informačný systém ÚIAM
2016	Nikola Míková	Navrhovanie simulinkovej schémy cez Internet
2013	Katarína Bugárová	Tvorba knižnice modelov technologických procesov
2013	Rastislav Jenčík	Internetový modul pre modelovanie a simuláciu procesov
2013	Juraj Malinič	Internetový modul pre modelovanie a simuláciu procesov
2011	Pavel Bodnár	Tvorba aplikácií pre virtuálne laboratórium
2011	Dávid Dubovský	Tvorba webovej aplikácie s využitím MVP frameworku Nette
2011	Dávid Schmidt	Využitie MATLAB Builder JA na tvorbu virtuálneho laboratória
2010	Veronika Csizmadiaová	Spojité riadenie laboratórneho zariadenia PCT40
2010	Martin Kalúz	Virtuálne laboratórium
2010	Jozef Krivák	Ohlasy - modul pre informačný systém ÚIAM
2010	Jaroslav Kuzma	Publikácie - modul pre informačný systém ÚIAM
2010	Jana Kmeťová	CONFIS - konferenčný informačný systém
2010	Andrea Szabová	Diskrétne riadenie laboratórneho zariadenia PCT40
2010	Lenka Vlková	Virtuálne laboratórium

2009	Róbert Lanák	Dovolenkový modul pre webový systém ÚIAM
2009	Martin Zubček	Systém na správu protetických výkonov
2008	Peter Šlapanský	Informačný systém pre sklad motorových palív v Oktan a.s. Kežmarok
2007	Pavel Dováľ	E--learningový internetový modul pre experimentálnu identifikáciu
2007	Eva Juhásová	Learningový modul pre termofluidný proces
2006	Peter Petruš	Identifikačný toolbox pre MATLAB/Simulink
2006	Barbora Šátková	E–learningový internetový modul pre Laboratórne cvičenia zo základov automatizácie
2005	Tibor Prček	Monitorovanie a riadenie výmenníka tepla LTR 700 s využitím Internetu
2005	Katarína Rybárová	Tvorba e-learningovej učebnice: Návrhy regulátorov
2005	Jana Závacká	Tvorba e–learningovej učebnice: Modelovanie technologických procesov
2004	Michal Lehocký	Tvorba informačného systému publikácií
2004	Dalibor Puna	Tvorba informačného systému Katedry informatizácie a riadenia procesov

3.3 Bakalári

Vedenie záverečných bakalárskych prác - **počet: 19**

Obdobie	Študent	Názov práce
2020	Denisa Chowaniecová	Webová aplikácia na vkladanie a spracovanie údajov
2018	Barbora Bačíková	Tvorba dynamických webových stránok
2017	Jakub Nosko	Tvorba portálu ŠVK
2015	Katarína Kirová	Tvorba knižnice modelov technologických procesov

2015	Martin Šimek	Tvorba web stránok ŠVK v redakčnom systéme Drupal
2014	Nikola Míková	Internetová verzia toolboxu PIDDESIGN
2014	Igor Stupavský	Webový portál Slovenskej spoločnosti priemyselnej chémie
2013	Michal Kleščík	Flash prezentácie pre predmet Informatizácia a informačné systémy
2012	Martin Franc	Web modul na spracovanie a analýzu údajov v informačnom systéme ÚIAM
2012	Viktor Kukla	Flash prezentácie pre predmet Identifikácia
2012	Ján Uhrinovský	Export údajov z informačného systému ÚIAM
2011	Juraj Malinič	Dynamické webové stránky VŠC v Humennom
2009	Pavel Bodnár	Dynamické generovanie obrázkov vo formáte SVG
2009	Dávid Dubovský	Generovanie prechodových charakteristík s využitím technológie AJAX
2009	Stanislav Kušev	Tvorba webových stránok
2008	Richard Dvoran	Tvorba dynamických webových stránok
2008	Martin Kalúz	Elektronická učebnica pre predmet Experimentálna identifikácia
2008	Jana Kmeťová	Web aplikácia na spracovanie a analýzu údajov
2008	Lenka Vlková	Elektronická učebnica pre predmet Informatizácia a informačné systémy

4 Učebné texty

- J. Mikleš – Ľ. Čirka – J. Oravec – M. Fikar: Návrh H2 a Hinf riadenia s využitím Ljapunovových funkcií, FCHPT STU v Bratislave, 2022.
- M. Bakošová – M. Fikar – Ľ. Čirka: Základy automatizácie. Laboratórne cvičenia zo základov automatizácie, Vydavateľstvo STU, Bratislava, 2003.

Dátum: 13.3.2023

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

…… ……
….
doc. Ing. Milena Reháková, PhD. podpis uchádzača
prodekanka pre denné a externé bakalárske štúdium,
inžinierske a doktorandské štúdium, ďalšie formy
vzdelávania, sociálnu starostlivosť o študentov

……
prof. Ing. Miroslav Fikar, DrSc.
riaditeľ
Ústav informatizácie, automatizácie a matematiky

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

Prehľad publikačnej a inej vedeckej aktivity

ABD, Kapitoly vo vedeckých monografiách vydané v domácich vydavateľstvách

1. Kvasnica, M. [40%] – Fikar, M. [10%] – **Čirka, Ľ.** [40%] – Herceg, M. [10%]: *Complexity Reduction in Explicit Model Predictive Control*, V *Selected Topics on Constrained and Nonlinear Control. Textbook*, STU Bratislava - NTNU Trondheim, str. 241–288, 2011. ISBN: 978–80–968627–4–0

ACB, Vysokoškolské učebnice vydané v domácich vydavateľstvách

1. Mikleš, J. [70%] – **Čirka, Ľ.** [10%] – Oravec, J. [10%] – Fikar, M. [10%]: *Návrh H2 a Hinf riadenia s využitím Ljapunovových funkcií*, FCHPT STU v Bratislave, 2022. ISBN: 978-80-8208-089-9

ADC, Vedecké práce v zahraničných karentovaných časopisoch

1. **Čirka, Ľ.** [60%] – Mikleš, J. [20%] – Fikar, M. [20%]: A deterministic LQ tracking problem: Parameterization of the controller. *Kybernetika*, č. 4, zv. **38**, str. 469–478, 2002. ISSN: 0023-5954 (2002: 0.341 - IF, Q3 - JCR Best Q, 0.472 – IF SJR) **A**
2. Kalúz, M. [65%] – García-Zubía, J. [10%] – Fikar, M. [15%] – **Čirka, Ľ.** [10%]: A Flexible and Configurable Architecture for Automatic Control Remote Laboratories. *IEEE Transactions on Learning Technologies*, č. 3, zv. **8**, str. 299–310, 2015. ISSN: 1939-1382 (2015: 1.129 - IF, Q2 - JCR Best Q, 0.701 - SJR, Q1 - SJR Best Q) **A+**
3. Vasičkaninová, A. [40%] – Bakošová, M. [30%] – **Čirka, Ľ.** [10%] – Kalúz, M. [10%] – Oravec, J. [10%]: Robust Controller Design for a

Laboratory Heat Exchanger. *Applied Thermal Engineering*, zv. **128**, str. 1297–1309, 2018.
(2018: 4.026 - IF, Q1 - JCR Best Q, 1.769 - SJR, Q1 - SJR Best Q) **A+**

4. Freeling, F. [10%] – Alygizakis, N. [10%] – von der Ohe, P. C. [10%] – Slobodník, J. [10%] – Oswald, P. [10%] – Aalizadeh, R. [10%] – **Čirka, Ľ.** [10%] – Thomaidis, N. S. [10%] – Scheurer, M. [20%]: Occurrence and potential environmental risk of surfactants and their transformation products discharged by wastewater treatment plants. *Science of The Total Environment*, zv. **681**, str. 475–487, 2019. ISSN: 0048-9697
(2019: 6.551 - IF, Q1 - JCR Best Q, 1.661 - SJR, Q1 - SJR Best Q) **A+**
5. von der Ohe, P. C. [15%] – Freeling, F. [10%] – Alygizakis, N. [10%] – Slobodník, J. [10%] – Oswald, P. [10%] – Aalizadeh, R. [10%] – **Čirka, Ľ.** [15%] – Thomaidis, N. S. [10%] – Scheurer, M. [10%]: Explaining the rationale behind the risk assessment of surfactants by Freeling et al. (2019). *Science of The Total Environment*, zv. **721**, 2020. ISSN: 0048-9697
(2020: 7.963 - IF, Q1 - JCR Best Q, 1.795 - SJR, Q1 - SJR Best Q) **A+**
6. Lundy, L. [2%] – Fatta-Kassinos, D. [1%] – Slobodník, J. [1%] – Karaolia, P. [1%] – **Čirka, Ľ.** [8%] – Kreuzinger, N. [1%] – Castiglioni, S. [1%] – Bijlsma, L. [1%] – Dulio, V. [1%] – Deviller, G. [1%] – Lai, F. Y. [1%] – Alygizakis, N. [1%] – Barneo, M. [1%] – Baz-Lomba, J. A. [1%] – Béen, F. [1%] – Cíchová, M. [8%] – Conde-Pérez, K. [1%] – Covaci, A. [1%] – Donner, E. [1%] – Ficek, A. [6%] – Hassard, F. [1%] – Hedström, A. [1%] – Hernandez, F. [1%] – Janská, V. [6%] – Jellison, K. [1%] – Hofman, J. [1%] – Hill, K. [1%] – Hong, P. [1%] – Kasprzyk-Hordern, B. [1%] – Kolarević, S. [1%] – Krahulec, J. [6%] – Lambropoulou, D. [1%] – de Llanos, R. [1%] – Mackuľak, T. [8%] – Martinez-García, L. [1%] – Martínez, F. [1%] – Medema, G. [1%] – Micsinai, A. [1%] – Myrmel, M. [1%] – Nasser, M. [1%] – Niederstätter, H. [1%] – Nozal, L. [1%] – Oberacher, H. [1%] – Očenášková, V. [1%] – Ogorzaly, L. [1%] – Papadopoulos, D. [1%] – Peinado, B. [1%] – Pitkänen, T. [1%] – Poza, M. [1%] – Rumbo-Feal, S. [1%] – Sánchez, M. B. [1%] – Székely, A. J. [1%] – Soltysova, A. [6%] – Thomaidis, N. S. [1%] – Vallejo, J. [1%] –

van Nuijs, A. [1%] – Ware, V. [1%] – Viklander, M. [1%]: Making Waves: Collaboration in the time of SARS-CoV-2 - rapid development of an international co-operation and wastewater surveillance database to support public health decision-making. *Water Research*, č. 1, zv. **199**, str. 1–7, 2021. ISSN: 0043-1354
(2021: 13.400 - IF, Q1 - JCR Best Q, 2.806 - SJR, Q1 - SJR Best Q) **A+**

7. Taha, H. M. [4%] – Aalizadeh, R. [1%] – Alygizakis, N. [1%] – Antignac, J. [1%] – Arp, H. P. H. [1%] – Bade, R. [1%] – Baker, N. [1%] – Belova, L. [1%] – Bijlsma, L. [1%] – Bolton, E. E. [1%] – Brack, W. [1%] – Celma, A. [1%] – Chen, W. [1%] – Cheng, T. [1%] – Chirsir, P. [1%] – **Čirka, Ľ.** [1%] – D'Agostino, L. A. [1%] – Feunang, Y. D. [1%] – Dulio, V. [1%] – Fischer, S. [1%] – Gago-Ferrero, P. [1%] – Galani, A. [1%] – Geueke, B. [1%] – Głowacka, N. [1%] – Glüge, J. [1%] – Groh, K. [1%] – Grosse, S. [1%] – Haglund, P. [1%] – Hakkinen, P. J. [1%] – Hale, S. E. [1%] – Hernandez, F. [1%] – Janssen, E. M. [1%] – Jonkers, T. [1%] – Kiefer, K. [1%] – Kirchner, M. [1%] – Koschorreck, J. [1%] – Krauss, M. [1%] – Krier, J. [1%] – Lamoree, M. H. [1%] – Letzel, M. [1%] – Letzel, T. [1%] – Li, Q. [1%] – Little, J. [1%] – Liu, Y. [1%] – Lunderberg, D. M. [1%] – Martin, J. W. [1%] – McEachran, A. D. [1%] – McLean, J. A. [1%] – Meier, C. [1%] – Meijer, J. [1%] – Menger, F. [1%] – Merino, C. [1%] – Muncke, J. [1%] – Muschket, M. [1%] – Neumann, M. [1%] – Neveu, V. [1%] – Ng, K. [1%] – Oberacher, H. [1%] – O'Brien, J. [1%] – Oswald, P. [1%] – Oswaldova, M. [1%] – Picache, J. A. [1%] – Postigo, C. [1%] – Ramirez, N. [1%] – Reemtsma, T. [1%] – Renaud, J. [1%] – Rostkowski, P. [1%] – Rüdel, H. [1%] – Salek, R. M. [1%] – Samanipour, S. [1%] – Scheringer, M. [1%] – Schliebner, I. [1%] – Schulz, W. [1%] – Schulze, T. [1%] – Sengl, M. [1%] – Shoemaker, B. A. [1%] – Sims, K. [1%] – Singer, H. [1%] – Singh, R. R. [1%] – Sumarah, M. [1%] – Thiessen, P. A. [1%] – Thomas, K. V. [1%] – Torres, S. [1%] – Trier, X. [1%] – Wezel, A. P. v. [1%] – Vermeulen, R. C. H. [1%] – Vlaanderen, J. J. [1%] – von der Ohe, P. C. [1%] – Wang, Z. [1%] – Williams, A. J. [1%] – Willighagen, E. L. [1%] – Wishart, D. S. [1%] – Zhang, J. [1%] – Thomaidis, N. S. [1%] – Hollender, J. [1%] – Slobodník, J. [1%] – Schymanski, E. L. [1%]: The NORMAN Suspect List Exchange

(NORMAN-SLE): facilitating European and worldwide collaboration on suspect screening in high resolution mass spectrometry. *Environmental Sciences Europe*, zv. **34**, 2022. ISSN: 2190-4707
(2022: 5.900 - IF, Q1 - JCR Best Q, 1.227 - SJR, Q1 - SJR Best Q) **A+**

8. Ng, K. [10%] – Alygizakis, N. [6%] – Nika, M. [6%] – Galani, A. [6%] – Oswald, P. [6%] – Oswaldova, M. [6%] – **Čirka, Ľ.** [6%] – Kunkel, U. [6%] – Macherius, A. [6%] – Sengl, M. [6%] – Mariani, G. [6%] – Tavazzi, S. [6%] – Skejo, H. [6%] – Gawlik, B. M. [6%] – Thomaidis, N. S. [6%] – Slobodník, J. [6%]: Wide-scope target screening characterization of legacy and emerging contaminants in the Danube River Basin by liquid and gas chromatography coupled with high-resolution mass spectrometry. *Water Research*, č. 119539, zv. **230**, 2023. ISSN: 0043-1354
(2022: 12.800 - IF, Q1 - JCR Best Q, 3.338 - SJR, Q1 - SJR Best Q) **A+**
9. Alygizakis, N. [10%] – Ng, K. [10%] – Maragou, N. [10%] – Alirai, S. [10%] – Behnisch, P. A. [10%] – Besselink, H. [10%] – Oswald, P. [10%] – **Čirka, Ľ.** [10%] – Thomaidis, N. S. [10%] – Slobodník, J. [10%]: Battery of In Vitro Bioassays: A Case Study for the Cost-Effective and Effect-Based Evaluation of Wastewater Effluent Quality. *Water*, č. 4, zv. **15**, 2023. ISBN: 2073-4441
(2022: 3.400 - IF, Q2 - JCR Best Q, 0.723 - SJR, Q1 - SJR Best Q) **A+**
10. Dulio, V. [2%] – Koschorreck, J. [2%] – van Bavel, B. [2%] – van den Brink, P. [2%] – Hollender, J. [2%] – Munthe, J. [2%] – Schlabach, M. [2%] – Aalizadeh, R. [2%] – Agerstrand, M. [2%] – Ahrens, L. [2%] – Allan, I. [2%] – Alygizakis, N. [2%] – Barcelo, D. [2%] – Bohlin-Nizzetto, P. [2%] – Boutroup, S. [2%] – Brack, W. [2%] – Bressy, A. [2%] – Christensen, J. H. [2%] – **Čirka, Ľ.** [2%] – Covaci, A. [2%] – Derksen, A. [2%] – Deviller, G. [2%] – Dingemans, M. M. L. [2%] – Engwall, M. [2%] – Fatta-Kassinos, D. [2%] – Gago-Ferrero, P. [2%] – Hernandez, F. [2%] – Herzke, D. [2%] – Hilscherova, K. [2%] – Hollert, H. [2%] – Junghans, M. [2%] – Kasprzyk-Hordern, B. [2%] – Keiter, S. [1%] – Kools, S. A. E. [1%] – Kruve, A. [1%] – Lambropoulou, D. [1%] – Lamoree, M. H. [1%] – Leonards, P. [1%] – Lopez, B. [1%] – de Alda,

M. L. [1%] – Lundy, L. [1%] – Makovinska, J. [1%] – Marigomez, I. [1%] – Martin, J. W. [1%] – McHugh, B. [1%] – Miege, C. [1%] – O'Toole, S. [1%] – Perkola, N. [1%] – Polesello, S. [1%] – Posthuma, L. [1%] – Rodriguez-Mozaz, S. [1%] – Roessink, I. [1%] – Rostkowski, P. [1%] – Ruedel, H. [1%] – Samanipour, S. [1%] – Schulze, T. [1%] – Schymanski, E. L. [1%] – Sengl, M. [1%] – Tarabek, P. [1%] – Ten Hulscher, D. [1%] – Thomaidis, N. S. [1%] – Togola, A. [1%] – Valsecchi, S. [1%] – van Leeuwen, S. [1%] – von der Ohe, P. C. [1%] – Vorkamp, K. [1%] – Vrana, B. [1%] – Slobodník, J. [1%]: The NORMAN Association and the European Partnership for Chemicals Risk Assessment (PARC): let's cooperate!. *Environmental Sciences Europe*, no. 1, vol. **32**, 2020. ISSN: 2190-4707
(2020: 5.893 - IF, Q1 - JCI Quartile) **A+**

ADD, Vedecké práce v domácich karentovaných časopisoch

1. Mészáros, A. [50%] – **Čirka, Ľ.** [40%] – Šperka, Ľ. [10%]: Intelligent Control of a pH Process. *Chemical Papers*, č. 2, zv. **63**, str. 180–187, 2009. ISSN: 0366-6352
(2009: 0.791 - IF, 0.222 - SJR) **A**
2. Kvasnica, M. [70%] – Herceg, M. [10%] – **Čirka, Ľ.** [10%] – Fikar, M. [10%]: Model predictive control of a CSTR: A hybrid modeling approach. *Chemical papers*, č. 3, zv. **64**, str. 301–309, 2010.
(2010: 1.096 - IF, Q3 - JCR Best Q, 0.288 - SJR, Q2 - SJR Best Q) **A**
3. Špánik, I. [30%] – **Čirka, Ľ.** [30%] – Májek, P. [40%]: Classification of wine distillates using multivariate statistical methods based on their direct GC-MS analysis. *Chemical Papers*, č. 3, zv. **69**, str. 395–401, 2015. ISSN: 0366-6352
(2015: 1.326 - IF, Q3 - JCR Best Q) **A**

ADE, Vedecké práce v ostatných zahraničných časopisoch

1. Mészáros, A. [50%] – **Čirka, Ľ.** [50%]: Control Analysis for Processes with Internal Recycle. *Chemical Engineering Transactions*, č. 18, str. 731–736, 2009. ISSN: 1974-9791 **B**

2. Kalúz, M. [40%] – **Čirka, Ľ.** [30%] – Fikar, M. [30%]: Virtual and Remote Laboratories in Process of Control Education. *International Journal of Online Engineering*, č. 1, zv. **8**, str. 8–13, 2012. ISSN: 1861-2121
(2012: 0.173 - SJR, Q3 - SJR Best Q) **B**

ADF, Vedecké práce v ostatných domácich časopisoch

1. **Čirka, Ľ.** [50%] – Fikar, M. [30%] – Mikleš, J. [20%]: A deterministic LQ tracking problem: Parameterization of the controller and the plant. *Journal of Electrical Engineering*, č. 5-6, zv. **53**, str. 126–131, 2002. ISSN: 1335-3632 **B**
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4. Herceg, M. [25%] – Kvasnica, M. [25%] – **Čirka, Ľ.** [25%] – Fikar, M. [25%]: Real-Time Predictive Control of a Servo Engine. *AT&P Journal Plus*, č. 2, str. 124–130, 2007. ISSN: 1336-5010
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6. Vöröš, J. [34%] – Mikleš, J. [33%] – **Čirka, Ľ.** [33%]: A Comparision of Different EKF Approaches for Parameters Estimation. *AT&P Journal Plus*, č. 2, str. 31–35, 2009. ISSN: 1336-5010
7. Herceg, M. [40%] – Kvasnica, M. [30%] – Fikar, M. [20%] – **Čirka, Ľ.** [10%]: Real-time Control of a Thermo-Optical Device Using Polynomial Approximation of MPC Scheme. *AT&P Journal Plus*, č. 2, str. 36–42, 2009. ISSN: 1336-5010
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9. Kalúz, M. [34%] – **Čirka, Ľ.** [33%] – Fikar, M. [33%]: Remote Experiment in Control Education. *AT&P Journal Plus*, č. 2, str. 50–54, 2011. ISSN: 1336-5010

ADN, Vedecké práce v domácich časopisoch registrovaných v databázach Web of Science alebo SCOPUS

1. Klaučo, M. [60%] – **Čirka, Ľ.** [35%] – Kukla, J. [5%]: Non-linear model predictive control of conically shaped liquid storage tanks. *Acta Chimica Slovaca*, č. 2, zv. **11**, str. 141–146, 2018. ISSN: 1337-978X **B**

AEC, Vedecké práce v zahraničných recenzovaných vedeckých zborníkoch, monografiách

1. Kvasnica, M. [60%] – Herceg, M. [20%] – **Čirka, Ľ.** [10%] – Fikar, M. [10%]: Time Optimal Control of Fuzzy Systems: a Parametric Programming Approach. V *Proceedings of the 28th IASTED Conference on Modelling, Identification and Control*, str. 640-805.pdf, 2009. ISBN: 978-0-88986-782-6 **B**
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5. Vasičkaninová, A. [50%] – Bakošová, M. [30%] – **Čirka, Ľ.** [10%] – Kalúz, M. [10%]: Robust Controller Design for a Heat Exchanger. *Chemical Engineering Transactions*, zv. **52**, str. 247–252, 2016. ISBN: 978-88-95608-42-6, ISSN: 2283-9216 **B**
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2. **Čirka, Ľ.** [60%] – Fikar, M. [30%] – Mikleš, J. [10%]: *A deterministic LQ tracking problem: Parameterization of the controller and the plant*, V *Selected Topics in Modelling and Control*, Editor(i): J. Mikleš, V. Veselý, Vydavateľstvo STU, Bratislava, zv. **3**, str. 38–44, 2002. ISBN: 80-227-1815-7 **B**
3. Mikleš, J. [34%] – **Čirka, Ľ.** [33%] – Fikar, M. [33%]: *Self-tuning LQ control of a chemical reactor*, V *Selected Topics in Modelling and Control*, Editor(i): J. Mikleš, V. Veselý, Vydavateľstvo STU, Bratislava, zv. **4**, str. 125–130, 2004. ISBN: 80-227-2094-1 **B**
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8. Vöröš, J. [40%] – Mikleš, J. [40%] – **Čirka, Ľ.** [20%]: Parameter Estimation of Nonlinear Systems. *Acta Chimica Slovaca*, č. 1, zv. **1**, str. 309–320, 2008. ISBN: 978-80-227-2957-4 **B**
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10. Herceg, M. [20%] – Mikleš, J. [20%] – Fikar, M. [20%] – Kvasnica, M. [20%] – **Čirka, Ľ.** [20%]: *Real-time 2DoF Control of a Quadruple Tank System with Integral Action*, V *Selected Topics in Modelling and Control*, Editor(i): Mikleš, J., Veselý, V., Slovak University of Technology Press, zv. **6**, str. 37–43, 2010. ISBN: 978-80-227-3318-2 **B**
11. Mikleš, J. [50%] – **Čirka, Ľ.** [50%]: *Transfer Matrix Solution of the Standard H2 Problem*, V *Selected Topics in Modelling and Control*, Editor(i): Mikleš, J., Veselý, V., Slovak University of Technology Press, zv. **6**, str. 58–62, 2010. ISBN: 978-80-227-3318-2 **B**
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Parametric Uncertainties. V *Selected Topics on Constrained and Nonlinear Control. Preprints*, STU Bratislava - NTNU Trondheim, str. 295–300, 2011. ISBN: 978–80–968627–2–6 **B**

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1. Mikleš, J. [40%] – **Čirka, Ľ.** [30%] – Fikar, M. [30%]: Adaptive LQ control of a CSTR via YK parameterization of the controller and the plant model. Editor(i): CD ROM R135, V *Proceedings of the 5th Intrernational Scientific - Technical Conference Process Control 2002*, University of Pardubice, Kouty nad Desnou (Czech Republic), str. CD ROM R115, 2002. ISBN: 80-7194-452-1
2. Fikar, M. [25%] – Bakošová, M. [30%] – **Čirka, Ľ.** [25%] – Dvoran, J. [20%]: Multimediálne štúdium na FCHPT STU. V *Principia Cybernetica '03*, TU Liberec, Liberec (Czech Republic), str. 206–210, 2003. ISBN: 80-7083-733-0
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8. Mikleš, J. [34%] – **Čirka, Ľ.** [33%] – Kožka, Š. [33%]: Closed-loop System Identification. V *Proceedings of the 3rd Intrernational Scientific - Technical Conference Process Control 1998*, Kouty nad Desnou, Czech Republic, str. 259–262, 1998. ISBN: 80-214-3282-9
9. Mikleš, J. [34%] – **Čirka, Ľ.** [33%] – Kožka, Š. [33%]: Closed-loop identification with application to a chemical reactor. V *Preprints of the 5th IFAC Symposium on Dynamics and Control of Process Systems DYCOPS '98*, Corfu, Greece, str. 233–238, 1998. **B**
10. **Čirka, Ľ.** [50%] – Fikar, M. [50%]: IDTOOL - A dynamical system identification toolbox for Matlab. V *Proceedings of the 4th Intrernational Scientific - Technical Conference Process Control 2000*, Kouty nad Desnou, Czech Republic, str. CD ROM RIP149.2, 2000.
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ACTA Press, Innsbruck, Austria, str. 457–175, 2005. ISBN: 0-88986-474-8, ISSN: 1025-8973 **B**

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18. Fikar, M. [20%] – Valo, R. [20%] – **Čirka, Ľ.** [20%] – Bakošová, M. [20%] – Dvoran, J. [20%]: Individualizovaný pristup vo vyučovaní základov automatizácie. V *Principia Cybernetica 2006*, Univerzita Tomáše Bati ve Zlíně, Zlín, Česká republika, str. CD ROM P4-21 - P4-28, 2006. ISBN: 80-7318-460-5
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24. Bakošová, M. [34%] – Fikar, M. [33%] – **Čirka, Ľ.** [33%]: E-learning in Course on Process Control. Editor(i): Sedláček, J., V *Sborník příspěvku konference a souteže eLearning 2007*, Gaudeamus, str. 191–197, 2007. ISBN: 978-80-7041-573-3
25. **Čirka, Ľ.** [40%] – Bakošová, M. [25%] – Fikar, M. [25%] – Herceg, M. [10%]: Dynamic Simulations of Chemical Processes via the MATLAB Web Server. V *Proceedings of the 15th Annual Conference Technical Computing Prague 2007*, Kongresové centrum ČVUT Praha, str. 34–34, 2007. ISBN: 978-80-7080-658-6
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AFG, Abstrakty príspevkov zo zahraničných vedeckých konferencií

1. Fikar, M. [20%] – Valo, R. [20%] – **Čirka, Ľ.** [20%] – Bakošová, M. [20%] – Dvoran, J. [20%]: Individualizovaný pristup vo vyučovaní základov automatizácie. V *Principia Cybernetica 2006*, Univerzita Tomáše Bati ve Zlíně, Zlín, Česká republika, str. 13, 2006. ISBN: 80-7318-460-5
2. Janáčová, A. [40%] – Májek, P. [10%] – **Čirka, Ľ.** [10%] – Špánik, I. [40%]: VOC composition of acacia honeys from various part of Europe. V *IUFoST, 15th World Congress of Food Science and Technology*, Cape Town, South Africa, 2010.
3. **Čirka, Ľ.** [65%] – Fikar, M. [25%] – Mikleš, J. [10%]: Adaptive LQ Control of a Laboratory Fan Heater. Editor(i): S. Krejčí, V *Proceedings of the 7th International Scientific - Technical Conference Process Control 2006*, University of Pardubice, University of Pardubice, Kouty nad Desnou, Czech Republic, str. R004b:1–12, 2006. ISBN: 80-7194-860-8

AFH, Abstrakty príspevkov z domácich vedeckých konferencií

1. Janáčová, A. [10%] – Štecová, A. [30%] – Cifrová, S. [10%] – Májek, P. [10%] – **Čirka, Ľ.** [10%] – Špánik, I. [30%]: Určenie pôvodu slovenských destilátov pomocou SNIF-NMR. V *Chemické listy: on-line*, Česká společnost chemická, str. 613–613, 2010. ISSN: 1213-7103

BAB, Odborné knižné publikácie vydané v domácich vydavateľstvách

1. Fikar, M. [15%] – Malíková, Ľ. [15%] – Staroňová, K. [10%] – Vávrová, Ľ. [10%] – Beblavá, E. [10%] – **Čirka, Ľ.** [10%] – Bajúszová, Z. [10%] – Halák, P. [10%] – Hanout, Z. [10%]: *Výskum potrieb a možností online vzdelávania verejnej správy v stredoeurópskom kontexte a príručka pre lektorov Moodle 2*, FSEV UK v Bratislave, 2012. ISBN: 978-80-970360-3-4

BCI, Skriptá a učebné texty

1. Bakošová, M. [35%] – Fikar, M. [35%] – **Čirka, Ľ.** [30%]: *Základy automatizácie. Laboratórne cvičenia zo základov automatizácie*, Vydavateľstvo STU, Bratislava, 2003. ISBN: 80-227-1831-9

BEE, Odborné práce v zahraničných zborníkoch (konferenčných aj nekonferenčných)

1. **Čirka, Ľ.** [34%] – Kalúz, M. [33%] – Fikar, M. [33%]: On-line Remote Control of MATLAB Simulations Based on Asynchronous Communication Model. Editor(i): Petr Byron, V *21th Annual Conference Proceedings: Technical Computing Prague 2013*, ICT Prague Press, str. 1–6, 2013. ISBN: 978-80-7080-863-4, ISSN: 2336-1662

BFB Abstrakty odborných prác z domácich podujatí (konferencie...)

1. **Čirka, Ľ.** [50%] – Kalúz, M. [50%]: Educational Device FlexyAir in Teaching of Process Control. Editor(i): R. Paulen and M. Fikar, V *Proceedings of the 24th International Conference on Process Control - Summaries Volume*, Slovak Chemical Library, Slovak University of

Technology in Bratislava, Radlinského 9, SK812-37, Bratislava, Slovakia, str. 33–33, 2023. ISBN: 978-80-8208-098-1

FAI, Zostavovateľské práce knižného charakteru (bibliografie, encyklopédie, katalógy, slovníky, zborníky, atlasy...)

1. Hrouzková, S. (zost.) [25%] – Hroboňová, K. (zost.) [25%] – **Čirka, Ľ.** (zost.) [25%] – Špánik, I. (zost.) [25%]: *Súčasný stav a perspektívy analytickej chémie v praxi: ACP 2022*, Editor(i): Hrouzková S., Hroboňová K., Čirka Ľ., Špánik I., Vydavateľstvo SPEKTRUM STU, Bratislava, 2022. ISBN: 978-80-227-5206-0

GAI, Správy

1. Kvasnica, M. [25%] – Herceg, M. [25%] – **Čirka, Ľ.** [25%] – Fikar, M. [25%]: Model Predictive Control of a CSTR. 2009.
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ABD	ACB	ADC	ADD	ADE	ADF	ADN	AEC	AED	AFC	AFD	AFG	AFH	BAB	BCI	BEE	BFB	FAI	GAI	
1	1	10	3	2	9	1	6	14	50	62	3	1	1	1	1	1	1	2	170

Dátum: 15.9.2023

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....
prof. Ing. Milan Polakovič, CSc. podpis uchádzača
prodekan pre vedeckovýskumnú činnosť

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

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prof. Ing. Miroslav Fikar, DrSc.
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Ústav informatizácie, automatizácie a matematiky

Ing. Ľuboš Čirka, PhD.
Oddelenie informatizácie a riadenia procesov, UIAM

Prehľad citácií vedeckých prác

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27	Chen, Joy Iong-Zong: The implementation to intelligent linkage service over AIoT hierarchical for material flow management. Journal of Ambient Intelligence and Humanized Computing, č. 2, zv. 12, str. 2207-2219, 2021.	WoS	iné
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