



Simona Volovat

COMPETENȚE LINGVISTICE

Limbă(i) maternă(e): **ROMÂNĂ**

Altă limbă (Alte limbi):

	COMPREHENSIVNE		VORBIT		SCRIS
	Comprehensiune orală	Citit	Exprimare scrisă	Conversație	
ENGLEZĂ	C2	C2	C2	C2	C2
FRANCEZA	C1	C1	C1	C1	C1
PORTUGHEZĂ	C1	C1	C1	C1	C1
GERMANA	B1	B1	B1	B1	A2

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

EDUCAȚIE ȘI FORMARE PROFESIONALĂ

2002 – 2009 Iași, România

MEDIC Universitatea de Medicina si Farmacie "Gr T Popa" Iasi

2010 – 2015 Iasi, România

DOCTORAT Universitatea de Medicina si Farmacie "Gr T Popa"

Domeniu de studiu Cancer colorectal | **Diplomă finală** Excelent

05/2019 – 09/2020

GLOBAL CLINICAL SCHOLARS RESEARCH TRAINING PROGRAM Harvard Medical School

Domeniu de studiu Biostatistica medicala, Design de trialuri clinice | **Diplomă finală** Distinctie - Top 10 proiecte

02/2019 – 09/2020

CERTIFICATE OF COMPETENCE IN BREAST CANCER European School of Oncology - University of Ulm

Domeniu de studiu Certificare europeana pe cancerul de san | **Diplomă finală** 9.4/10

EXPERIENȚA PROFESIONALĂ

12/2009 – 12/2015 Iași

MEDIC REZIDENT UNIVERSITATEA DE MEDICINA SI FARMACI "GR T POPA" IASI

10/2011 – 11/2012 Paris, Franța

MEDIC REZIDENT INSTITUTUL CURIE - HOPITAL RENE HUGUENIN

08/2014 – 02/2022 Iași

ASISTENT UNIVERSITAR UNIVERSITATEA DE MEDICINA SI FARMACIE "GR T POPA"

08/2016 – 07/2021 Iași

MEDIC SPECIALIST ONCOLOGIE MEDICALA INSTITUTUL REGIONAL DE ONCOLOGIE

06/2017 – 04/2018 Lisabona, Portugalia

MEDIC SPECIALIST ONCOLOGIE MEDICALA BREAST UNIT- CHAMPALIMAUD CLINICAL CENTER

02/2022 – 02/2024 România

SEF LUCRARI UNIVERSITATEA DE MEDICINA SI FARMACIE "GR T. POPA" IASI

07/2021 – ÎN CURS

MEDIC PRIMAR ONCOLOGIE MEDICALA INSTITUTUL REGIONAL DE ONCOLOGIE IASI

02/2024 – ÎN CURS Iasi, România

CONFERENTIAR UNIVERSITAR UNIVERSITATEA DE MEDICINA SI FARMACIE "GR T. POPA" IASI

● **CONFERINȚE ȘI SEMINARE**

06/2007 – 07/2007 Viena, Austria

6th International Summer school on Experimental and Clinical Oncology for Medical Students

02/2010 – 03/2010 Frankfurt, Germania

EORTC Winter Meeting on Gastrointestinal Cancer 5th edition

03/2010 – 04/2010 Munchen, Germania

Expert Practice in Lung Cancer meeting

04/2010 – 05/2010 Londra, Anglia

5th European international kidney cancer symposium

03/2011 – 04/2011

HHAC Hospitation Associated with Program for the Advancement of Therapy in Hepatocellular Carcinoma (PATH)

04/2012 – 05/2012 Paris, Franta

Prise en charge des sarcomes et des tumeurs conjunctives

10/2012 – 11/2012 Leuven, Belgium

“Preceptorship on Angiogenesis in Colorectal Cancer and Other Cancers”

12/2012 – 01/2013 Paris, Franta

XXVIII Cours de chimiotherapie antitumorale et traitement medical du cancer

02/2013 – 03/2013 Ermatigen, Elvetia

12th ESO Masterclass in Clinical Oncology

05/2013 – 06/2013 Paris, Franta

Tour d'Europe Preceptorship at Gustave Roussy Institute

09/2014 – 10/2014 Iasi, Romania

Course on Epidemiology

● **CERCETARE MEDICALA**

Cercetare medicala

Granturi

1. Project Erasmus+, contract nr. 2014-1-RO01-KA203-002940 - « Massive open online courses with videos for palliative clinical field and intercultural and multilingual medical communication», derulat in perioada 01.09.2014-31.08.2017, coordonator Universitatea de Medicina si Farmacie „Grigore T. Popa” Iasi, project manager conf. dr. Petris Ovidiu Rusalim

2. Project CNCSIS, contract nr. 31GR/14.05.2007 - „Mecanisme moleculare implicate in profilul variabil al rețelei de semnalizare care asigura relaxarea endotelio-dependenta a muschiului neted vascular”, derulat in perioada 2007-2008, Universitatea de Medicina si Farmacie „Grigore T. Popa” Iasi , Project manager prof. dr. Serban Ionela Lacramioara

3. Internal grant Universitatea de Medicina si Farmacie „Grigore T. Popa” Iasi „Grigore T. Popa” Iasi, contract nr. 6986/2020 - „Prevention of cisplatin nephrotoxicity in cancer patients”, 01.04.2020-31.03.2022; project manager dr. Hogas Simona Mihaela

4. Cercetător angajat al Frontier Management Consulting SRL, în proiectul „Platforma bioinformatica pentru diagnosticul precoce al cancerului colorectal și bronhopulmonar” acronim PROMED cu număr de înregistrare electronică SMIS 129400, Program Operațional Competitivitate

Participare în peste 20 de **studii clinice randomizate** ca sub-investigator și investigator principal.

Indice Hirsch=9

● **PUBLICAȚII**

2013

[Changes in the histological spectrum of glomerular diseases in the past 16 years in the North-Eastern region of Romania.](#)

BMC Nephrol. 2013;14(1)

2013

[Dispersive behaviours of the complex fluid via non-differentiability](#)

Wulfenia Journal. 2013; 20(12)

2014

[Second-line chemotherapy with gemcitabine and oxaliplatin in combination with loco-regional hyperthermia \(EHY-2000\) in patients with refractory metastatic pancreatic cancer-preliminary results of a prospective trial.](#)

Rom Reports Phys. 2014;66(1):166–74. ISSN: 1221-1451

2014

[The results of combination of ifosfamid and locoregional hyperthermia \(EHY 2000\) in patients with advanced abdominal soft-tissue sarcoma after relapse of first line chemotherapy](#)

Rom Reports Phys. 2014;66(1):175–81. ISSN: 1221-1451

2015

[The Harmonic Oscillator Problem in the Scale Relativity Theory. Its Implications in the Morphogenesis of Structures at Various Scale Resolutions.](#)

J Comput Theor Nanosci. 2015;12(12):5870–81

2016

[The efficacy and safety of hepatic arterial infusion of oxaliplatin plus intravenous irinotecan, leucovorin and fluorouracil in colorectal cancer with inoperable hepatic metastasis.](#)

Taylor & Francis; 2016 May 3;28(3):235–41

[Evaluation of cumulative effects of chemotherapy and bevacizumab \(Avastin®\) in oncological patients with periodontal disease.](#)

Rev Chim. 2017;68(3)

2018

[Nonlinear Behaviors in Gene Therapy Theoretical and experimental aspects](#)

Materiale plastice 2018; 55(3): 340-343

2018

[Magnesium Supplementation and Cisplatin-Induced Renal Impairment in Cancer Patients](#)

Rev Chim. 2018;69(9):2520–3

2019

[**Targeting CDK4/6 pathways and beyond in breast cancer**](#)

The Breast. 2019;43:8–17

2019

[**Cardioprotective apelin effects and the cardiac-renal axis: review of existing science and potential therapeutic applications of synthetic and native regulated apelin**](#)

J Hum Hypertens . 2019 Jun;33(6):429-435

2019

[**Correlations Between Distinct Ras Mutations and Response to Bevacizumab in Patients with Colorectal Cancer**](#)

Rev Chim 2019; 70(6)

2020

Primitive Gastric Lymphoma - a Series of 3 Cases

Revista de Chimie 71(1):416-419; 2020

2020

Contribution of Pathology in surgical oncology in malignant tumors of salivary glands

Revista de Chimie 71(1):420-425; 2020

2020

[**MiRNA and LncRNA as Potential Biomarkers in Triple-Negative Breast Cancer: A Review**](#)

Front Oncol. 2020; 10: 526850

2020

Nephrotoxicity/renal failure after therapy with 90Yttrium- and 177Lutetium- radiolabeled somatostatin analogs in different types of neuroendocrine tumors: a systematic review

Nuclear Medicine Communications. 41(7):601-617

2020

[**The role of IgE specific for galactose- \$\alpha\$ -1,3-galactose in predicting cetuximab induced hypersensitivity reaction: a systematic review and a diagnostic meta-analysis**](#)

. Sci Rep 10, 21355 (2020).

2021

[**Oncogenic mechanisms in renal insufficiency**](#)

Clinical Kidney Journal, Volume 14, Issue 2, February 2021, Pages 507–515

2015

Early and Late Complications after Hepatic Arterial “Port-a-Cath” Implantation in the Treatment of Hepatic Metastasis from Colorectal Cancer

Journal of Surgery 2015; 10(4):277-281

2021

[**Determining factors of renal dysfunction during cisplatin chemotherapy**](#)

Experimental and Therapeutic Medicine, 21, 83

2021

[**Improved Personalized Neuroendocrine tumors’ diagnosis predictive power by new receptor somatostatin image processing quantification:**](#)

J. Pers. Med. 2021, 11(10), 1042

2021

Nanomedicine to modulate immunotherapy in cutaneous melanoma (Review)

Exp Ther Med 21: 535, 2021

2021

Predictors of the response to nivolumab immunotherapy in the second or subsequent lines for metastatic non small cell lung cancers

Exp Ther Med 21: 605, 2021

2021

[An Insight into Deficient Mismatch Repair Colorectal Cancer Screening in a Romanian Population—A Bi-Institutional Pilot Study](#)

Medicina 2021, 57, 847

2021

[A Comprehensive Review of the Use of Antioxidants and Natural Products in Cancer Patients Receiving Anticancer Therapy](#)

Anti-Cancer Agents in Medicinal Chemistry 2021; 21

2021

[Improved Personalised Neuroendocrine Tumours' Diagnosis Predictive Power by New Receptor Somatostatin Image Processing Quantification](#)

J. Pers. Med. 2021, 11, 1042

2022

[The Landscape of Nanovectors for Modulation in Cancer Immunotherapy](#)

Pharmaceutics 2022, 14, 397.

2022

[Landscape of Immunotherapy Options for Colorectal Cancer: Current Knowledge and Future Perspectives beyond Immune Checkpoint Blockade](#)

Life 2022, 12, 229

2010

[Non-adherence to adjuvant hormonal treatment in early breast cancer](#)

Jurnalul de chirurgie 2010;6 (3), 275-280

2022

[Use of Personalized Biomarkers in Metastatic Colorectal Cancer and the Impact of AI](#)

Cancers 2022, 14, 4834

2022

[A Comprehensive Review of the Use of Antioxidants and Natural Products in Cancer Patients Receiving Anticancer Therapy](#)

Anticancer Agents Med Chem. 2022;22(8):1511-1522.

2022

[Immunotherapy-Related Publications in Colorectal Cancer: A Bibliometric Analysis](#)

Healthcare 2022, 10, 75.

2022

[Endoglin \(CD105\) as a putative prognostic biomarker for colorectal cancer: a systematic review.](#)

Medicine and Pharmacy Reports.. doi:10.15386/mpr-2120

2011

Assessment of the quality of life of women with breast cancer in adjuvant treatment with tamoxifen or aromatase inhibitors--a randomized trial

Rev Med Chir Soc Med Nat Iasi. 2011 Jan-Mar;115(1):53-7.

2011

Quality of life for women receiving adjuvant hormonal treatment for cancer- a randomized trial comparing tamoxifen with aromatase inhibitors

Jurnalul de chirurgie 2011; 7 (2): 193-202

2022

Multi-fractal modeling of curcumin release mechanism from polymeric nanomicelles,

Drug Delivery, 29:1, 2883-2896

2018

A New Carcinogenesis and Tumor Progression Model in the Framework of Non-linear Dynamics

Bul.Inst.Polit.Iasi. t. LVIII (LXII), Fasc 1, 2012

2014

Flow dynamics regimens via non-differentiability in complex fluids

U.P.B. Sci. Bull., Series A, Vol. 76, Iss. 2, 2014

2018

Immunotherapy in advanced hepatocellular cancer

Medical-Surgical J. 2018;122(2):352-7

2018

Special dynamics of exosomes by means of an informational model

Bul.Inst.Polit.Iasi. 2018;64(68):3;19-32

[Carcinoid Heart Disease and Cardiac Metastasis in Neuroendocrine Tumors: Insights from Pathology to Personalised Diagnostic and Therapeutic Approach](#)

Romanian Journal of Anatomy 2019, Vol. 18 Issue 2, p105-112. 8p

2020

A multicenter, single-arm, basket design, phase II study of NC-6004 plus gemcitabine in patients with advanced unresectable lung, biliary tract, or bladder cancer

Oncotarget. 2020; 11: 3105-3117.

2020

Is multidisciplinary learning valuable to build a breast cancer specialist career? The perspective of the first 2 cohorts of the ESO-ULM Certificate of Competence in Breast Cancer (CCB)

Clin Obstet Gynecol Reprod Med 6:

2021

Somatostatin receptors scintigraphy prioritization criteria based on NET patient epidemiological profile a bi-centric study

Med. Surg. J. – Rev. Med. Chir. Soc. Med. Nat., Iași 2021, 125(3): 443-450.

2023

[HER2 Positive Breast Cancer Therapy - A Challenging and Continuously Moving Pathway - A Narrative Literature Review: HER2+ BC Therapy](#)

Arch Breast Cancer [Internet]. 2022 Oct. 27 [cited 2023 Aug. 28];10(1):15-2

2023

Compassion fatigue and compassion satisfaction among Romanian emergency medicine personnel

Front Med (Lausanne). 2023 Jul 24;10:1189294.

2023

Theoretical and Experimental Aspects of Sodium Diclofenac Salt Release from Chitosan-Based Hydrogels and Possible Applications

Gels. 2023; 9(5):422

2023

Cisplatin and AKI: an ongoing battle with new perspectives—a narrative review

Int Urol Nephrol 55, 1205–1209 (2023).

2023

Connection between Cardiac Fibrosis Biomarkers and Echocardiography Parameters in Advanced Chronic Kidney Disease Patients

Journal of Clinical Medicine. 2023; 12(8):3003

2023

Immunotherapy with PD-1 Inhibitor Nivolumab in Recurrent/Metastatic Platinum Refractory Head and Neck Cancers—Early Experiences from Romania and Literature Review

Diagnostics. 2023; 13(16):2620

2023

Unfolding the role of the PI3K/AKT/MTOR pathway in male breast cancer: A pragmatic appraisal

Breast, 2023, 72: art. no 103576.

Link <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10507227/pdf/main.pdf>

2023

Global Burden of Cardiovascular Diseases and Risks, 1990-2022

Write here the description...

J Am Coll Cardiol, 2023, 82(25): 2350-2473

Link <https://pubmed.ncbi.nlm.nih.gov/38092509/>

2023

The Global, Regional, and National Burden of Adult Lip, Oral, and Pharyngeal Cancer in 204 Countries and Territories A Systematic Analysis for the Global Burden of Disease Study 2019

JAMA Oncol, 2023, 9(10): 1401-1416

Link <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10485745/>

2023

Clinical and morphofunctional identity of the nasal SMAS

Write here the description...

Rom J Morphol Embryol, 2023, 64(2): 199-206

Link <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10520399/pdf/RJME-64-2-199.pdf>

2024

Predicting the Feasibility of Curative Resection in Low Rectal Cancer: Insights from a Prospective Observational Study on Preoperative Magnetic Resonance Imaging Accuracy

Medicina. 2024; 60(2):330.

Link <https://doi.org/10.3390/medicina60020330>

2024

Oncolytic Virotherapy: A New Paradigm in Cancer Immunotherapy

International Journal of Molecular Sciences. 2024; 25(2):1180

2024

A Prospective Study on the Progression, Recurrence, and Regression of Cervical Lesions: Assessing Various Screening Approaches

Journal of Clinical Medicine. 2024; 13(5):1368

2024

Digging in real-word electronic database for assessing CDK 4/6 inhibitors adherence in breast cancer patients from Romania

Front. Pharmacol. 15:1345482

2024

GBD 2021 Demographics Collaborators. Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950–2021, and the impact of the COVID-19 pandemic: a comprehensive demographic analysis for the Global Burden of Disease Study 2021

The Lancet. 11 March 2024, doi: 10.1016/S0140-6736(24)00476-8

● **CAPITOLE DE CARTE**

Carti/Capitole de carte

- 1.Volovat, C., Volovat, SR., Agop, M. (2022). Nanotechnology and Immunomodulators in Cancer. In: Kesharwani, R.K., Keservani, R.K., Sharma, A.K. (eds) Immunomodulators and Human Health. Springer, Singapore. Print ISBN 978-981-16-6378-9
- 2.Andre R., Volovat S. and Cardoso F. (2017). Treatment of advanced disease: Guidelines. In: U. Veronesi, A. Goldhirsch, P. Veronesi, O. Gentilini and M. Leonardi, ed., Breast Cancer Innovations in Research and Management. Springer, pp. 549-557 (ISBN 978-3-319-48848-6)
- 3.S. Volovat, B. Sousa, F. Cardoso. Breast cancer in Oxford Desk Reference in Oncology (2nd ed.) ed. Oxford University Press, 2021, ISBN 978-019-874-544-0
- 4.S Volovat, JM Ribeiro, A Konsoulova, S Paluch-Shimon, F Cardoso (2020). Management of Advanced Breast Cancer in Young Women: What's new in systemic treatment. In: O. Gentilini, A Partridge, O Pagani. Breast cancer in young women. ed Springer, pag. 127-142, ISBN 978-3-030-24762-1
- 5.Volovat C, Volovat SR "Update in oncology vol 1" Editura „Gr. T.Popa” UMF Iasi 2019 (ISBN 978-606-544-671-7)
- 6.Volovat C, Volovat SR "Update in oncology vol 2" Editura „Gr. T.Popa” UMF Iasi 2019 (ISBN 978-606-544-672-4)
- 7.C VOLOVAT, S VOLOVAT. „Obezitatea si cancerul mamar”. În: Carmen Vulpoi, Voichița Mogoș, Crisina Preda „Actualități in Endocrinologia Oncologică. Sillabus”. Editura „Gr. T. Popa”, UMF Iași 2014; pg: 163-170 (ISBN 978-606-544-233-4)
- 8.Volovat C, Volovat SR. „Evaluarea pacientului onco-geriatric: particularitati terapeutice”. In: Ioana Dana Alexa „Actualitati in geriatrie”. Editura „Gr. T.Popa” UMF Iasi 2011; pg 237-245 (ISBN 978-606-544-077-7)
- 9.RESURSE EDUCATIONALE MEDICALE ȘI LINGVISTICE ÎN ÎNGRIJIREA PALIATIVĂ. Resurse educaționale create prin Programul Erasmus+ în cadrul proiectului „Cursuri online pe suport video în domeniul îngrijirii paliative și comunicării medicale” (Ref. Nr. 2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-478-2)
- 10.MEDICAL AND LINGUISTIC PALLIATIVE CARE TOOLKIT. Educational material created within the Erasmus+ Programme project „Massive open online courses with videos for palliative clinical field and intercultural and multilingual medical communication” (Ref. No. 2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-480-5)

Carti/Capitole de carte

- 11.TOOLKIT PER LO SVILUPPO DI COMPETENZE MEDICHE E LINGUISTICHE NEL CAMPO DELLE CURE PALIATIVE. Materiale didattico creato nel Erasmus+ Program progetto “Corsi aperti online su larga scala e video tutorial nell’ambito delle cure palliative e della comunicazione medica interculturale e multilinguistica” (Ref. Numero 2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-483-6)
- 12.CUIDADO Y COMUNICACIÓN PARA LOS CUIDADOS PALIATIVOS. Material educacional creado dentro del Programa Erasmus+ en el proyecto „Cursos online masivos en abierto con videos para cuidados paliativos y habilidades de la comunicacion interculturales y multilingue en medicina” (Ref. Numero 2014-1-RO01-KA203-002940); Ed:Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-481-2)

- 13.MEDISCHE EN LINGUISTISCHE TOOLKIT VOOR PALLIATIVE ZORG. Educatieve hulpbronnen veroorzaakt door het project Erasmus+ „Tal van open cursussen met video's voor de palliatieve klinische sector en interculturele, meertalige medische communicatie" (2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-479-9)
- 14.MEDICAL AND LINGUISTIC PALLIATIVE CARE PLURILINGUAL TOOLKIT. Educational material created within the Erasmus+ Programme project „Massive open online courses with videos for palliative clinical field and intercultural and multilingual medical communication" (Ref. No 2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-484-3)
- 15.RESSOURCES EDUCATIONNELLES MEDICALES ET LINGUISTIQUES EN SOINS PALLIATIFS. Ressources éducationnelles créées dans le cadre du projet Erasmus+ Programme „Cours en ligne avec support vidéo pour le domaine des soins palliatifs et la communication médicale" (Ref. 2014-1-RO01-KA203-002940); Ed: Ovidiu Petris, Anca Colibaba - Editura Gr.T.Popa, 2017 (ISBN 978-606-544-482-9)
- 16.Cătălin Pricop, Dan Mischianu, Orsolya Martha. Cancerul de prostată local avansat și metastazant Editura PIM, 2015: 322-341. (ISBN 978-606-13-2779-9)
- 17.Constantin Volovat, Simona Volovat. Infectia HIV si cancerul In: Abord interdisciplinary in infectia cu HIV, Editia a IIa, Editura Tehnopress 2019, pag 450-505. (ISBN 978-606-687-386-4)
- 18.Dragos-Mircea Median, George Iancy, Andrei-Ioan Corha, **Simona Ruxandra Volovat**. Cancerul mamar-actualitati 2022, p634-70. In Terapii moderne in cancer 2022, Viata medicala, Editura Medichub Media, Bucuresti, 2022. ISBN 978-606-95567-0-2
- 19.Mihai Marinca, Simona Volovat. Epidemiologia cancerelor umane In: Lucian Miron Oncologie generala editia a III-a, Editura "Gr.T.Popa", 2016, Pag. 32-51

Carti/Capitole de carte

- 20.Simona Volovat, Lucian Miron. Etiopatogenia cancerului. Factori de risc In: Lucian Miron Oncologie generala editia a III-a, Editura "Gr.T.Popa", 2016, Pag. 51-69
- 21.Lucian Miron, Simona Volovat. Terapiile moleculare tintite In: Lucian Miron Oncologie generala editia a III-a, Editura "Gr.T.Popa", 2016, Pag. 320-344
- 22.Simona Volovat. Epidemiologia cancerelor In: Lucian Miron Elemente de nursing in cancer editia a II-a, Editura "Gr.T.Popa", 2018, Pag. 29-37
- 23.Simona Volovat. Terapiile alternative si complementare in cancer In: Lucian Miron Elemente de nursing in cancer editia a II-a, Editura "Gr.T.Popa", 2018, Pag. 237-241
- 24.Simona Volovat, Lucian Miron. Cancerul mamar In: Lucian Miron Elemente de nursing in cancer editia a II-a, Editura "Gr.T.Popa", 2018, Pag. 361-372