

# **CURRICULUM VITAE**



## **Dr. AHMED HASSAN HAMED ARBAB**

**(MHPE, PhD, M. Pharm, B. Pharm)**

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### **PERSONAL DETAILS & RESEARCH ID**

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- **Address:** Department of Pharmacognosy, Faculty of Pharmacy, University of Khartoum, Sudan
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- **E-mail:** [arbabssn@gmail.com](mailto:arbabssn@gmail.com), [ahmed.arbab@uofk.edu](mailto:ahmed.arbab@uofk.edu)
- **Language:** Arabic (Native) and English (TOEFL-IBT Certificate)
- **Marital status:** Married (with four children)
- **Nationality:** Sudanese

### **RESEARCH ID:**

- **Google Scholar: Ahmed H. Arbab:** <https://scholar.google.com/citations?hl=en&user=8ekgcaEAAAAJ&view>
- **ResearchGate: Ahmed H. Arbab:** <https://www.researchgate.net/profile/Ahmed-Arbab>
- **Scopus: Arbab, Ahmed Hassan:** <https://www.scopus.com/authid/detail.uri?authorId=56606899100>
- **Web of Science: Arbab, Ahmed H:** <https://www.webofscience.com/wos/author/record/ACP-4685-2022>
- **ORCID: Ahmed Arbab:** <https://orcid.org/0000-0002-5975-112X>

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### **ACADEMIC QUALIFICATIONS**

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#### **(A) Pharmacy:**

- **Feb. 2011 - Mar 2016: Doctor of Philosophy (Ph.D.) in Pharmacognosy**

Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

- **Aug 2006-Dec 2008: Master of Pharmacy (M. Pharm) in Pharmacognosy**

Faculty of Pharmacy, Omdurman Islamic University In collaboration with Medical and Aromatic Plants Research institute, Sudan.

- **July 1998 - Dec 2003: Bachelor of Pharmacy (B. Pharm) with Honors, 2<sup>nd</sup> class Division1**

Faculty of Pharmacy, University of Khartoum, Sudan

#### **(B) Health professions education:**

- **Sep-2019 - Oct 2021: Mater of Health Professions Education (MHPE)**

Educational Development Center, Sudan Medical Specialization Board, Khartoum  
Sudan

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## EMPLOYMENT HISTORY

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- **Mar.20201 to date:** Head of Department and assistant professor of Pharmacognosy, Faculty of Pharmacy, University of Khartoum, Sudan.
- **March2018 -Feb2022:** Associate professor, Department of Pharmacognosy, Faculty of Pharmacy, University of Khartoum.
- **Feb.2018 -Feb2022:** Assistant professor, Department of Pharmacognosy, Faculty of Pharmacy, University of Khartoum.
- **Nov.2016 – Jan.2018:** Head of Department and assistant professor of Pharmacognosy and Phytochemistry, Faculty of Pharmacy, Omdurman Islamic University
- **Apr.2016 – Oct.2018:** Assistant professor, Department of Pharmacognosy Faculty of Pharmacy, Omdurman Islamic University, Omdurman, Sudan.
- **Jan.2011 – Apr.2016:** Researcher, Department of Pharmacognosy, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- **Jul.2010 – Oct.2011:** Co-Ordinator of Examination and Academic Affairs, Faculty of Pharmacy, Omdurman Islamic University, Omdurman, Sudan
- **Dec.2008 – Sep.2011:** Lecturer, Department of Pharmacognosy and Phytochemistry, Faculty of Pharmacy, Omdurman Islamic University, Omdurman, Sudan.
- **Jul.2005 – Nov.2008:** Teaching Assistant, Department of Pharmacognosy, Faculty of Pharmacy, Omdurman Islamic University, Omdurman, Sudan.

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## AWARD & PRIZES

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- **Award of Excellence in Scientific Research and Publishing** (First Position), Deanship of Scientific Research, King Saud University, Academic year 2015/2016.
- **First place and Golden Feather** at the Sixth Scientific Conference for the Best Graduate Research Conducted in Saudi Arabia (Academic year 2014-2015), Saudi Inter-University Graduate Research Competition, Jeddah, Saudi Arabia 30/3-2/4/2015.
- **Award of the Sixth Scientific Symposium** (2<sup>nd</sup> Position), King Saud University (2014)
- **Ph.D. Grants**, the Program of Attracting Outstanding Researchers, College of Pharmacy, King Saud University, Kingdom of Saudi Arabia, 2011- 2015.

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## EXPERIENCES

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### (A)Teaching Experience:

#### **Pharmacognosy, Phytochemistry and Phytotherapy**

- Teaching Courses of Botany, Pharmacognosy, Chromatography, Phytochemistry, Phytotherapy, Quality Control of Herbal Drugs, Poisonous Plant and Fungi for Pharmacy Students, University of Khartoum, Omdurman Islamic University, Nahda College, etc.
- Teaching Practical Courses of Pharmacognosy, Phytochemistry, and Chromatography for Pharmacy Students, Omdurman Islamic University, King Saud University, etc.

### **Research Methodology & Health Professions education**

- Teaching Research Methodology Course for Undergraduate and Graduate Pharmacy Students, Faculty of Pharmacy, University of Khartoum, Omdurman Islamic University Ribat University, 2017 to date.
- Facilitator & Member of Graduation Project Proposal evaluation Committee, Master of Health Professions education, Sudan Medical Specialization Board, Sudan
- External Examiner for Under graduate & Graduate Students, Faculty of Pharmacy (The Ribat National University, Sudan International University, Omdurman Islamic University, etc.

### **(B) Research Experience:**

- Supervision of Graduate studies students, Faculty of pharmacy, University of Khartoum (2018 – to date)
- Membership of the Committee For evaluating and examining of graduate students' thesis, Faculty of pharmacy, University of Khartoum (2018 – to date).
- Researcher in a Research Project entitled 'Evaluation of antiviral efficacies of natural products against hepatitis B virus gene expressions and replication' funded by National Science, Technology & Innovation Plan (Grant:11-MED1585-02), Ministry of Higher Education, Saudi Arabia (2013-2015).
- Experience in section, extraction, phytochemical screening & bioassay-guided fractionation of plants.
- Experience in bioassay related techniques including human cell culture, cell lines maintenance, cell proliferation or cytotoxicity assays, ELISA based hepatitis B virus (HBV) gene expression assays cytoprotective, hepatoprotective and antioxidant activity assays of natural products.

### **(C) Administrative Experience:**

#### **University administrative positions & membership:**

- Head of Department of Pharmacognosy, Faculty of Pharmacy, University of Khartoum (3/2021-)
- Membership of the Faculty Committee, Faculty of Pharmacy, University of Khartoum (3/1018-).
- Membership of the Curriculum Committee, Faculty of Pharmacy, University of Khartoum (3/1018-)
- Membership of the Research Committee, Faculty of Pharmacy, University of Khartoum (3/1018-)
- Membership of the Research Committee, Faculty of Pharmacy, University of Khartoum (3/1018-)
- Head of the Department of Pharmacognosy, Omdurman Islamic University (11/1016 - 1/2018)
- Membership of Faculty of Pharmacy Committee, Omdurman Islamic University (11/1016 - 2/2018)
- Membership of the Department of Pharmacognosy council, Faculty of Pharmacy, U of K (3/1018-).
- Co-Ordinator of Examination and Academic Affairs, Omdurman Islamic University (7/2010 - 9/2011.)
- Hospital Pharmacist, Friendship Hospital, Omdurman (10/2004-9/2005).

#### **National committees:**

- Membership of the Accreditation Core Team for Pharmacy Schools, Sudan Medical Council (11/2022-)
- Membership of the Research Ethics Committee, National Medicines &Poisons Board (5/2022-)

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## TRAINING COURSES & WORKSHOPS

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- Research Methodology and Evidence Based medicine module, Sudan Medical Specialization Board (26/12/2020-30/1/2021).
- Faculty enhancement module, Educational Development Center, Sudan Medical Specialization Board (21/11 /- 17/12/2019)
- Quality, Program Evaluation & Accreditation in Higher Education module, Sudan Medical Specialization Board (17/10/-14/11/2020).
- Clinical teaching and community-based education module, Educational Development Center, Sudan Medical Specialization Board (14/12--5/9/2020, extended due to COVID-19 lockdown)
- Learners Assessment Course, Educational Development module, Sudan Medical Specialization Board (5/9 - 3/10/2020)
- Curriculum Design & Analysis Course, Educational Development Center, Sudan Medical Specialization Board (26/10-12/12/2019).
- Learning Psychology and Learning Methods module, Educational Development Center, Sudan Medical Specialization Board (7/9-24/10/2019).
- Academic Advising, Khartoum University Center for Advanced Training (13-16/12/2017)
- Basics of Scientific research and scientific Writing (Medical and health sector), Khartoum University Center for Advanced Training (15-23/11/2017).
- Measurement and Evaluation, Khartoum University Center for Advanced Training (1-7/11/2017)
- Fundamentals of Research and Scientific Publishing, Deanship of Library Affairs, King Saud University (April 2016).
- Electronic archiving & Data management, Deanship of Skills Development, King Saud University (February 2016).
- Scientific References Management Software (EndNote), Deanship of Skills Development, King Saud University (May 2014).
- Skills of Electronic Data Searching, Deanship of Skills Development K.S.U. (December 2014)
- Comprehensive Research Enabling Work Shop, Omdurman Islamic University, Faculty of Medicine and Health Science, Medical Education Development Centre (April 2007).
- Fundamentals of Biostatistics using SPSS, Faculty of Pharmacy O.I.U. Islamic University, (2006).
- National Training Course on Computational Chemistry, Molecular Docking and its application in Drug designs, Medicinal and Aromatic Plants Research Institute, Khartoum, Sudan (July-2006).

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## RESEARCH SUPERVISION & REVIEWER TO PEER REVIEWED JOURNALS

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### Thesis & dissertation supervision

- M.Pharm, Pharmacognosy (Mohamed Abakar Maaz, University of Khartoum) on the thesis entitled “Phytochemical, Antioxidant and Anti-acetyl cholinesterase inhibitory activities screening of some Sudanese medicinal plants” (Approved).
- M.Pharm, Molecular Medicine, (Loai Abdelgadir Babiker, University of Khartoum) “Phytochemical screening and antimicrobial activity of *Cymbopogon schoenanthus* flowers” (Approved).
- M.Pharm, Clinical Pharmacy (Amna Mohamed Khalid, University of Khartoum) “Impact of clinical pharmacist intervention in detecting drug related problem in Military Hospital, 2019” (Approved).
- M.Pharm (Nadine H.A., University of Khartoum) “Knowledge & awareness of pharmacists about

autism spectrum disorders at community pharmacy in Khartoum state, 2018" (Approved).

- M. Pharm (Fatima Mugdad Alrofie, University of Khartoum) "Retrospective Comparison of Efficacy and Safety of Basiliximab and Antithymocyte Globulin in Kidney Transplant Recipients at Ahmed Gasim Hospital, 2018" (Approved).
- M. Pharm (Ayat Abdallah Mohammed, University of Khartoum) "Assessment of Management of Ischemic Stroke at Ibrahim Malik Teaching Hospital 2017-2018" (Approved)
- M. Pharm (Hanan Siddig Ali, University of Khartoum) "Mobile Phone Based Interventions in Improving Medication Adherence in Hypertensive Patients at Aldamer Hospital" (Approved).
- M. Pharm (Maram Hag El-daw Hamid, University of Khartoum) "Bacteriological Profile and Antibiotic Susceptibility of Diabetic Foot Infections In Ribat University Hospital 2019" (Approved).

**Reviewer to peer reviewed journals:**

- Journal of diabetes and metabolic disorders (ISSN: 2251-6581, Publisher: Springer, Germany)
- Natural product research (ISSN: 1478-6427, Publisher: Taylor & Francis, England)
- Pharmaceutical biology (ISSN: 1744-5116, Publisher: Taylor & Francis, England)
- IJID Regions (ISSN: 2772-7076, Publisher: Elsevier, Netherlands)
- PloS one (ISSN: 1932-6203, Publisher: San Francisco CA, USA)

**PUBLICATIONS & CONFERENCE PRESENTATIONS**

**(A) Research Articles:**

1. Mohamed JM, Mahajan N, El-Sherbiny M, Khan S, Al-Serwi RH, Attia MA, Altriny QA, **Arbab AH**. Ameliorated Stomach Specific Floating Microspheres for Emerging Health Pathologies Using Polymeric Konjac Glucomannan-Base Domperidone. BioMed Research International. 2022;13:3670946 <https://doi.org/10.1155/2022/3670946>
2. Mohammed AA, **Arbab AH**, Abdalla TM. Assessment of risk factors and management of ischemic stroke at Ibrahim Malik Teaching Hospital in Khartoum, 2018. Matrix Science Medica. 2022 Apr 1;6(2):48. [https://doi.org/10.4103/mtsm.mtsm\\_2\\_21](https://doi.org/10.4103/mtsm.mtsm_2_21)
3. **Arbab AH**, Eltahir YA, Elsadig FS, Yousef BA. Career Preference and Factors Influencing Career Choice among Undergraduate Pharmacy Students at University of Khartoum, Sudan. *Pharmacy*. 2022; 10(1), 26; <https://doi.org/10.3390/pharmacy10010026>
4. Mothana RA, **Arbab AH**, ElGamal AA, Parvez MK, Al-Dosari MS. Isolation and Characterization of Two Chalcone Derivatives with Anti-Hepatitis B Virus Activity from the Endemic Socotraen *Dracaena cinnabari* (Dragon's Blood Tree). *Molecules*. 2022;27(3),952. <https://doi.org/10.3390/molecules27030952>
5. Elseddig MK, **Arbab AH**, Eltahir YA, Yousef BA. Perception of Pharmacy Teachers About Their Roles and Current Practice at Governmental Universities in Sudan. *Advances in Medical Education and Practice*. 2022;13:309. <https://doi.org/10.2147/AMEP.S355931>
6. Yousif MA, **Arbab AH**, Yousef BA. Perceived Academic Stress, Causes, and Coping Strategies Among Undergraduate Pharmacy Students During the COVID-19 Pandemic. *Advances in Medical Education and Practice*. 2022;13:189. <https://doi.org/10.2147/AMEP.S350562>
7. Parvez MK, Ahmed S, Al-Dosari MS, Abdelwahid MA, **Arbab AH**, Al-Rehaily AJ, Al-Oqail MM. Novel Anti-Hepatitis B Virus Activity of *Euphorbia schimperi* and Its Quercetin and Kaempferol Derivatives. *ACS omega*. 2021. 6 (43), 29100-29110. <https://pubs.acs.org/doi/abs/10.1021/acsomega.1c04320>
8. Al-Nour, MY, **ArbabAH.**, Parvez, MK, Mohamed AY, Al-Dosari, MS. In-vitro Cytotoxicity and In-silico Insights of the Multi-target Anticancer Candidates from *Haplophyllum tuberculatum*. *Borneo*

9. Ali, NH., & **Arbab AH**. Awareness and Knowledge of Autism Spectrum Disorders Among Community Pharmacists in Khartoum state (Sudan), 2018. *ACTA Pharmaceutica Sciencia*.2021:59(2):291-304. <https://doi.org/10.23893/1307-2080.APS.05917>
10. Sedahmed, AA, Al-nour, MY, Mirghani, MH, Abualgasim1, HE, Elhad E, **Arbab AH**. (2021). Phytochemical, in vivo, and in silico Anticonvulsant Activity Screening of Albizia Amara Leave's Ethanolic Extract. *Hacettepe University Journal of the Faculty of Pharmacy*, 2021: 41 (1), 9-22. <https://dergipark.org.tr/en/pub/hujpharm/issue/60867/861481>
11. Hamid MH, **Arbab AH**, Yousef, BA. Bacteriological profile and antibiotic susceptibility of diabetic Foot infections at Ribat University hospital; a retrospective study from Sudan. *Journal of Diabetes & Metabolic Disorders*, 2020, 19(2), 1397-1406. <https://doi.org/10.1007/s40200-020-00660-8>
12. Alrofie FM, **Arbab AH**. Retrospective Comparison of Efficacy and Safety of Basiliximab and Antithymocyte Globulin in Kidney Transplant Recipients. 2020, 1(1), 7-12. <https://onlinejournals.uofk.edu/index.php/KJPS/article/view/2768>.
13. Mothana RA, **Arbab AH**, Parvez M K, Al-Dosari S. Assessment of anti-hepatitis B virus activity of endemic medicinal plants from Socotra Island. *African Journal of Pharmacy and Pharmacology*, 2020,14(8), 294-299. <https://doi.org/10.5897/AJPP2020.5176>
14. Parvez, M K, Al-Dosari M S, **Arbab AH**, Al-Rehaily A J Abdelwahid, M. A. S. Bioassay-guided isolation of anti-hepatitis B virus flavonoid myricetin-3-O-rhamnoside along with quercetin from *Guiera senegalensis* leaves. *Saudi Pharmaceutical Journal*, (2020), 28(5), 550-559. <https://doi.org/10.1016/j.jsps.2020.03.006>
15. Parvez MK, **Arbab AH**, Al-Dosari MS, Sakina Niyazi. In vitro and In vivo Antihepatoprototoxic, Anti-Hepatitis B Virus and Hepatic CYP450 Modulating Potential of *Cyperus rotundus*. *Saudi Pharmaceutical Journal*, 2019, 27(4), 558–564. <https://doi.org/10.1016/j.jsps.2019.02.003>
16. Parvez MK, Al-Dosari MS, **Arbab AH**, Alam P, Alsaad MS, Khan AA. Hepatoprotective effect of *Solanum surattense* leaf extract against chemical- induced oxidative and apoptotic injury in rats. *BMC Complementary Alternative Medicine*. 2019;19(1):154
17. Babiker L A, Hamid, M M, **Arbab AH**. (2019). Antimicrobial, Antioxidant Activities &Phytochemical Screening of Extracts and Essential Oil of *Cymbopogon schoenanthus* Flowers. *South Asian Research Journal of Natural Products*, 2019, 2(3), 1-8. <https://journalsarjnp.com/index.php/SARJNP/article/view/30086>
18. Alam P, Parvez MK, **Arbab AH**, Al Qasoumi SI, Al Howiriny T, and Al-Dosari MS. Analysis of antioxidative and antiviral biomarkers  $\beta$ -amyrin,  $\beta$ -sitosterol, lupeol, ursolic acid in *Guiera senegalensis* leaves extract by validated HPTLC methods. *Saudi Pharmaceutical Journal*, 2018(5):685-693. <https://doi.org/10.1016/j.jsps.2018.02.022>
19. Parvez MK, **Arbab AH**, Al-Dosari MS, Al-Rehaily AJ, Alam P, Ibrahim KE, Alsaad MS, Rafatullah S. Protective effect of *Atriplex suberecta* extract against oxidative and apoptotic hepatotoxicity. *Experimental and therapeutic medicine*. 2018.15(4):3883-91. <https://doi.org/10.3892/etm.2018.5919>
20. **Arbab AH**, Parvez MK, Al-Dosari MS and Al-Rehaily AJ. In vitro evaluation of novel antiviral activities of 60 medicinal plants extracts against hepatitis B virus. *Experimental and Therapeutic Medicine*, 2017, 14(1): 626–634. <https://doi.org/10.3892/etm.2017.4530>
21. Alam P, **Arbab AH**, Parvez MK, Dosari MS, Ahmed S, Shamim M. Inter-species comparative antioxidant assay and HPTLC analysis of sakuranetin in the chloroform and ethanol extracts of aerial parts of *Rhus retinorrhoea* and *Rhus tripartita*. *Pharmaceutical Biology*, 2017. 55 (1), 1450-1457 <https://doi.org/10.1080/13880209.2017.1304428>
22. Alam P, Parvez MK, **Arbab AH**, Dosari MS. Quantitative analysis of Rutin, Quercetin, Naringenin, and Gallic acid by Validated RP- and NP-HPTLC Methods for Quality Control of Anti-HBV Active Extract of *Guiera senegalensis*. *Pharmaceutical Biology*, 2017, 55(1),1317-1323. <https://doi.org/10.1080/13880209.2017.1300175>

23. Alam P, Alajmi, MF, **Arbab AH**, Parvez. K, Siddiqui NA, Al Qasoumi SI, Al-Rehaily AJ, Al-Dosari MS, Basudan OA. Comparative Study of Antioxidant Activity and Validated RP-HPTLC Analysis of Rutin in the Leaves of Different *Acacia* Species Grown In Saudi Arabia, *Saudi Pharmaceutical Journal*, 2016. <https://doi.org/10.1016/j.jps.2016.10.010>
24. **Arbab AH**, Parvez MK, Al-Dosari MS, Al-Rehaily AJ, Ibrahim KE, Alam P, Al-Said MS and Rafatullah S. Therapeutic Efficacy of Ethanolic Extract of *Aerva Javanica* Aerial Parts In The Amelioration of Ccl4-Induced Hepatotoxicity and Oxidative Damage In Rats. *Food & Nutrition Research*, 2016. <https://doi.org/10.3402/fnr.v60.30864>
25. **Arbab AH**, Parvez MK, Al-Dosari MS, Rafatullah S, Al-Sohaibani M, Zorag EA, Al-Rehaily AJ and Al-Said MS. Hepatoprotective and Antiviral Efficacy of *Acacia Mellifera* Leaves Fractions Against Hepatitis B Virus. *BioMed Research International*. 2015, 2015:1-10. <https://doi.org/10.1155/2015/929131>
26. Ghorab M, Al-Said M, Al Dosari M, El-Gazzar M and **Arbab AH**. In-Vitro Anticancer Evaluation of Some Novel Thioureido-Benzensulfonamide Derivatives. *Molecules* 2016, 21 (4), 409, <https://doi.org/10.3390/molecules21040409>
27. **Arbab AH**, El-imam Y.M.A., Almagboul A.Z. Antimicrobial and Phytochemical Screening of *Anogeissus Leiocarpus* (DC.) Gill&Peer, Stem Bark Extracts. *OJPS*, 2008, 1(4) 624-629.
28. **Arbab, A.H**, El-imam Y.M.A., Gad Kariem, EA. Chromatographic and spectroscopic analysis of *Anogeissus leiocarpus*(DC.)Gill & Peer, Stem Bark Extracts. *OJPS*. 2008, 1(4), 624-629.

#### **(B) Review Articles**

1. Arbab AH, Zaroug EE, Mudawi MM. Review on Plants with Traditional Uses and Bio-activity against Hair Graying. *Current Traditional Medicine*. 2022;1;8(3):35-45. <https://doi:10.2174/2215083808666220208105012>
2. Parvez MK, **Arbab AH**, Al-Dosari MS, Al-Rehaily AJ. Antiviral Natural Products against Chronic Hepatitis B: Recent Developments. *Current pharmaceutical design*, 2016, 22(3), 286-293, <https://doi:10.2174/1381612822666151112152733>
3. **Arbab AH**. Review On *Anogeissus leiocarpus* A Potent African Traditional Drug, *International J.Res. in Pharm.and Chem.* 2014, 4(3), 496-500. <https://www.ijrpc.com/archives15.html>
4. **Arbab, A.H** and Eltahir M.M. Review on Skin Whitening Agents, *Khartoum Pharmacy Journal*, 13(1), 2010, 5-9. <https://www.researchgate.net/publication/249650287> Review on Skin Whitening Agents

#### **(C) Book Chapter:**

1. Parvez MK, Al-Dosari MS, **Arbab AH**. An Update on Natural or Herbal Drugs against Hepatitis B Virus; in Advances in Medicine and Biology. Volume 179, Nova science publisher, Inc. New York, 2021, pp. 195-184 <https://novapublishers.com/shop/advances-in-medicine-and-biology-volume-179/>

#### **(D) Conference Abstracts**

1. Parvez MK, **Arbab AH**, Al-Dosari MS. In vitro Hepatoprotective and Anti-Hepatitis B Activities of *Cyperus rotundus* Tuber Fractions, 25th Annual Conference of the Asian Pacific Association for the Study of the Liver (APASL), *Hepatology International*, 2016, 10(Supp1)S1-506.
2. **Arbab AH**, Al-Dosari MS, Evaluation of Anti-HBV Potential of *Guiera Senegalensis* Leaves in Cell Culture Model. 6th KSA Scientific Conference, Jeddah, Saudi Arabia March, 2015
3. Parvez MK, **Arbab AH**, Al-Dosari MS, Al-Rehaily AJ. In Vitro Screening of Novel Anti-Hepatitis B Virus Activities of 60 Medicinal Plant Extracts. 29th International Conference on Antiviral Research (ICAR), International Society for Antiviral Research, California. April, 2016.

#### **Research metrics:**

**Google scholar:** Ahmed H. Arbab <https://scholar.google.com/citations?user=8ekgcaEAAAJ&hl=ar&oi=ao>  
 - Citations: 512 - h-index: 14

**Scopus:** Arbab, Ahmed Hassan: <https://www.scopus.com/authid/detail.uri?authorId=56606899100>  
 - Citations: 3 - h-index: 11