

Huan V Doan
School of Chemistry
Postal address:
School of Chemistry
Cantocks Close
Clifton
Bristol
BS8 1TS
Email: huan.doan@bristol.ac.uk



Research interests

I am interested in the synthesis and characterisation of new porous materials (such as metal-organic frameworks, zeolites and functionalised silicas) to address challenges in sustainable technologies (catalytic process, gas separation and energy storage).

Employment

EPSRC Doctoral Prize Fellow

School of Chemistry
Faculty of Science
United Kingdom
14 Aug 2020 → 13 Aug 2022

Lecturer

Hanoi University of Mining and Geology
Viet Nam
15 Nov 2011 → present

Research output

Green synthesis of H-ZSM-5 zeolite-anchored O-doped g-C₃N₄ for photodegradation of Reactive Red 195 (RR 195) under solar light

Pham, X. N., Nguyen, H. T., Pham, T. N., Nguyen, T. -T-B., Nguyen, M. B., Thi, V. T. T. & Doan, H. V., 29 Sep 2020, In : Journal of the Taiwan Institute of Chemical Engineers.

Preparation and testing of cesium Brønsted ion-exchanged Al-SBA-15 supported heteropoly acid as heterogeneous catalyst in the fructose fructan synthesis

Tran, Q. V., Truong, T. H., Hung, T. Q., Doan, H. V., Pham, X. N., Le, T. H. N., Bach, L. G. & Nguyen, T. V., 3 Aug 2020, In : Journal of porous materials.

Highly efficient photocatalytic oxidative desulfurization of dibenzothiophene with sunlight irradiation using green catalyst of Ag@AgBr/Al-SBA-15 derived from natural halloysite

Pham, X. N., Nguyen, B. M., Ngo, H. S. & Doan, H. V., 29 Jul 2020, In : Journal of Industrial and Engineering Chemistry. 90, p. 358-370 13 p.

Inclusion and release of ant alarm pheromones from metal-organic frameworks

Amer Hamzah, H., Rixson, D., Paul-Taylor, J., Doan, H. V., Dadswell, C., W. Roffe, G., Sridhar, A., L. Hobday, C., Charlie Wedd, C., Düren, T., Hughes, W. O. H., Spencer, J. & Burrows, A. D., 21 Jul 2020, In : Dalton Transactions. 30, 5 p.

Direct synthesis of highly ordered Ti-containing Al-SBA-15 mesostructured catalysts from natural halloysite and its photocatalytic activity for oxidative desulfurization of dibenzothiophene

Pham, X. N., Nguyen, M. B. & Doan, H. V., 9 Jul 2020, In : Advanced Powder Technology.

One-pot preparation of alumina-modified polysulfone-graphene oxide nanocomposite membrane for separation of emulsion-oil from wastewater

Nguyen, V. H. T., Nguyen, M. N., Truong, T. T., Nguyen, T. T., Doan, H. V. & Pham, X. N., 31 Mar 2020, (Accepted/In press) In : Journal of Nanomaterials. 2020, 12 p., 9087595.

Characterization and application of C–TiO₂ doped cellulose acetate nanocomposite film for removal of Reactive Red-195
Pham, X. N., Pham, D. T., Ngo, H. S., Nguyen, M. B. & Doan, H. V., 13 Jan 2020, In : Chemical Engineering Communications. p. 1-14

Using supercritical CO₂ in the preparation of metal-organic frameworks: Investigating effects on crystallisation
Doan, H. V., Cheng, F., Dyrakumunda, T., Elsegood, M. R. J., Chin, J., Rowe, O., Redshaw, C. & Ting, V. P., 31 Dec 2019, In : Crystals. 10, 1, 28 p., 17.

Study on the HPA immobilisation on Al-SBA-15 support over Brønsted groups
Truong, T. H., Cuong Do, V., Mai Do, N., Hung, T. Q., Doan, H. V., Nguyen, T. N., Doan, T. H., Le, T. H. N., Nguyen, T. V., Bach, L. G. & Tran, Q. V., 1 Nov 2019, In : Molecular Catalysis. 478, 110571.

Activity and stability of amino-functionalized SBA-15 immobilized 12-tungstophosphoric acid in the oxidative desulfurization of a diesel fuel model with H₂O₂
Pham, X. N. & Van Doan, H., 2 Sep 2019, In : Chemical Engineering Communications. 206, 9, p. 1139-1151 13 p.

Defective hierarchical porous copper-based metal-organic frameworks synthesised via facile acid etching strategy
Doan, H., Sartbaeva, A., Eloi, J.-C., Davis, S. & Ting, V. P., 26 Jul 2019, In : Scientific Reports. 9, 1, 9 p., 10887.

Hierarchical Metal–Organic Frameworks with Macroporosity: Synthesis, Achievements, and Challenges
Doan, H., Amer Hamzah, H., Prabhakaran, P., Petrillo, C. & Ting, V. P., 8 Jul 2019, In : Nano-Micro Letters. 11, 1, 33 p., 54.

Synthesis of Ag-AgBr/Al-MCM-41 nanocomposite and its application in photocatalytic oxidative desulfurization of dibenzothiophene
Pham, X. N., Nguyen, B. M., Thi, H. T. & Van Doan, H., 1 Aug 2018, In : Advanced Powder Technology. 29, 8, p. 1827-1837 11 p.

Understanding the AC conductivity and permittivity of trapdoor chabazites for future development of next-generation gas sensors
Bordeneuve, H., J. Wales, D., J.W. Physick, A., Doan, H., Ting, V. P. & R. Bowen, C., 1 Apr 2018, In : Microporous and Mesoporous Materials. 260, p. 208-216 9 p.

One-step synthesis, characterization and oxidative desulfurization of 12-tungstophosphoric heteropolyanions immobilized on amino functionalized SBA-15
Pham, X. N., Tran, D. L., Pham, T. D., Nguyen, Q. M., Thi, V. T. T. & Van, H. D., 1 Jan 2018, In : Advanced Powder Technology. 29, 1, p. 58-65 8 p.

Controlled formation of hierarchical metal-organic frameworks using CO₂ expanded solvent systems
Doan, H., Fang, Y., Yao, B., Zhili, D., White, T. J., Sartbaeva, A., Hintermair, U. & Ting, V. P., 5 Sep 2017, In : ACS Sustainable Chemistry and Engineering. 5, 9, p. 7887-7893 7 p.

Synthesis of hierarchical metal-organic frameworks in DMSO/CO₂-gas expanded solvent systems
Doan, H. V., 1 Feb 2017.

A hierarchical porous material synthesised in a green solvent system
Doan, H., Bristol, Bath and NTU & Ting, V. P., Feb 2017.

New directions in gas sorption and separation with MOFs: General discussion
Addicoat, M., Bennett, T., Chapman, K., Denysenko, D., Dincă, M., Doan, H., Easun, T., Eddaoudi, M., Farha, O., Gagliardi, L., Haase, F., Hajiahmadi Farmahini, A., Hendon, C., Jorge, M., Kitagawa, S., Lamberti, C., Lee, J. S. M., Leus, K., Li, J., Lin, W. & 16 others, Liu, X., Lloyd, G., Lu, C., Ma, S., Perez, J. P. H., Ranocchiari, M., Rosi, N., Stassen, I., Ting, V., Van Der Veen, M., Van Der Voort, P., Vande Velde, C. M. L., Volkmer, D., Vornholt, S., Walsh, A. & Yaghi, O. M. , 1 Jan 2017, In : Faraday Discussions. 201, p. 175-194 20 p.

New directions in gas sorption and separation with MOFs: general discussion' Faraday Discussions
Doan, H., 2017, Faraday Discussions, 201.

Synthesis of hierarchical metal-organic frameworks in CO₂ expanded solvent systems
Doan, H., Ting, V. P. & Bristol, Bath and NTU, Mar 2016.

Trapdoor zeolites for intelligent separation of CO₂
Doan, H., Sartbaeva, A. & Ting, V. P., Jul 2015.

The application of nanoporous materials to problems in sustainable energy
Ting, V. P., Doan, H., Wagner, J. & Chuck, C. J., 1 Oct 2014, p. 2. 1 p.

The potential of continuous oscillatory flow reactors in biodiesel reaction
Ho, S. V. & Doan, H., Oct 2014, *Proceedings of Oil Refining and Petrochemical Engineering (ORPE-2014) conference*. p. 181-189 8 p.

Use of waste TPA in the synthesis of a metal organic framework (MOF) for use in hydrogen storage
Ting, V. P. & Doan, H., Oct 2014, *Proceedings of Oil Refining and Petrochemical Engineering (ORPE-2014) conference*. p. 47-53 6 p.

Activities

3rd International Conference on Nanomaterials Science and Mechanical Engineering (ICNMSME2020)
Huan V Doan (Speaker)
7 Jul 2020 → 10 Jul 2020

SVUK Leader Camp
Huan V Doan (Speaker)
9 Feb 2020

3rd International Conference on Metal-Organic Frameworks and Porous Polymers (EuroMOF 2019)
Huan V Doan (Speaker)
27 Oct 2019 → 30 Oct 2019

Second Joint NSFC-RSC Symposium on Sustainable Chemistry and Processes
Huan V Doan (Speaker)
19 Sep 2019 → 20 Sep 2019

1st International Gas Adsorption Summer School
Huan V Doan (Participant)
9 Sep 2019 → 13 Sep 2019

European Conference on Neutron Scattering (ECNS 2019)
Huan V Doan (Speaker)
30 Jun 2019 → 5 Jul 2019

STEM for BRITAIN 2019
Huan V Doan (Speaker)
13 Mar 2019

MOF2018
Huan V Doan (Speaker)

9 Dec 2018 → 13 Dec 2018

Emerging Material Technologies Summit (EMTS)

Huan V Doan (Speaker)

3 Nov 2018 → 8 Nov 2018

85th IUVSTA Workshop on Nanoporous Materials for Green Energy Conversion and Storage

Huan V Doan (Speaker)

14 Oct 2018 → 19 Oct 2018

8th International workshop in Characterization of Porous Materials: From Angstroms to Millimeters

Huan V Doan (Speaker)

6 May 2018 → 9 May 2018

Powder Diffraction and Rietveld Refinement School 2018

Huan V Doan (Participant)

9 Apr 2018 → 12 Apr 2018

Spring School in Computational Chemistry 2018

Huan V Doan (Participant)

13 Mar 2018 → 16 Mar 2018

Joint ISIS Crystallography User Group Meeting and Winter Meeting of the PCG-SCMP

Huan V Doan (Participant)

6 Nov 2017 → 7 Nov 2017

Neutron and Muon Science and User Meeting 2017

Huan V Doan (Participant)

28 Jun 2017 → 29 Jun 2017

New directions in porous crystalline materials: Faraday Discussion

Huan V Doan (Speaker)

5 Jun 2017 → 7 Jun 2017

11th International Symposium on the Characterization of Porous Solids

Huan V Doan (Speaker)

14 May 2017 → 17 May 2017

3-Minute Thesis competition

Huan V Doan (Speaker)

28 Apr 2017

DL_MONTE workshop

Huan V Doan (Participant)

19 Apr 2017 → 21 Apr 2017

Student-led conference in sustainable development

Huan V Doan (Invited speaker)

16 Mar 2017

International Conference on Advanced Materials and Nanotechnology

Huan V Doan (Speaker)

12 Feb 2017 → 16 Feb 2017

Molecular (and Lattice) Dynamics to Analyse Neutron Scattering Experiments

Huan V Doan (Participant)
10 Nov 2016 → 12 Nov 2016

ISIS Molecular Spectroscopy Science Meeting 2016

Huan V Doan (Participant)
9 Nov 2016 → 10 Nov 2016

The 39th British Zeolite Association Meeting

Huan V Doan (Speaker)
21 Mar 2016 → 23 Mar 2016

STEM ambassador

Huan V Doan (Participant)
2 Jul 2015 → 7 Jul 2015

STEM ambassador

Huan V Doan (Contributor)
Apr 2015

Solid-state magic angle spinning nuclear magnetic resonance training

Huan V Doan (Participant)
23 Mar 2015 → 25 Mar 2015

Prizes**Alumni Foundation Conference Travel Award**

Doan, Huan V (Recipient), Feb 2017

Bristol PLUS Award

Doan, Huan V (Recipient), Jun 2017

Colston Research Society Travel Award

Doan, Huan V (Recipient), 25 Oct 2019

Dalton Transactions Poster Prize

Doan, Huan V (Recipient), Mar 2016

EPSRC Doctoral Prize Fellowship

Doan, Huan V (Recipient), 14 Aug 2020

Honourable Mention Award

Doan, Huan V (Recipient), 12 Sep 2020

Inspirational Bristol Scientist

Doan, Huan V (Recipient), 9 Oct 2019

Materials Horizons Poster Prize

Doan, Huan V (Recipient), Nov 2018

Poster Prize at the Second Joint NSFC-RSC Symposium on Sustainable Chemistry and Processes

Doan, Huan V (Recipient), 22 Sep 2019

Research Student Conference Fund

Doan, Huan V (Recipient), May 2018

RSC Travel Grants for PhD Students and Early Career Scientists

Doan, Huan V (Recipient), Apr 2017

RSC Travel Grant towards attending the IUPAC Congress 2019

Doan, Huan V (Recipient), 5 Jul 2019

Runner up Prize

Doan, Huan V (Recipient), Feb 2017

STFC Travel Grant towards attending the European Conference on Neutron Scattering (ECNS 2019)

Doan, Huan V (Recipient), 30 Jun 2019

Travel Bursaries for PhD students

Doan, Huan V (Recipient), Nov 2018

Travel Grants for PhD Students and Early Career Scientists

Doan, Huan V (Recipient), Oct 2018