List of Publications:

Paper published in National and International journals:

(1) Characterization of inhibitive study of gel-grown hydroxyapatte crystals at physiological temperature.

Bharat Parekh, Mihir Joshi, Ashok Vaidya

Journal of Crystal Growth, 310 (2008) 1749-1753. (Proceeding of ICCG-15)

(2) Thermal, FT-IR, and dielectric studies of gel grown sodium oxalate single crystals.

B.B. Parekh, P.M. vyas, S. R. Vasant ans M. J. Joshi

Bull. Mater Sci., **31(2)** (2008), 143-147.

(3) Growth and Characterization of Gel Grown Calcium Pyrophosphate
Tetrahydrate Crystals

Bharat B. Parekh and Mihir J. Joshi

Crystal Research and Technology, **42(2)** (2007) 127.

(4) Growth and Characterization of 4-(2-hydroxyphenylamino)-pent-3-en-2-one Single Crystals

Bharat B. Parekh, Dushyant H. Purohit, P. Sagayaraj, H. S. Joshi and M.J. Joshi Crystal Research and Technology, **42(4)** (2007) 407.

(5) Modification of gel technique for micro-crystals of bio-materials: *In situ* growth and dissolution studies

Bharat B. Parekh, M. J. Joshi, A. D. B. Vaidya

Current Science, **93(3)**, (2007), 373-378

(6) Crystal Growth and Dissolution of Brushite Crystals by Different

Concentration of Citric Acid Solutions

Bharat Parekh & M.J. Joshi,

Indian Journal of Pure and Applied Physics, **43** (2005) 675.

(7) Thermal, FT-IR and SHG efficiency studies of L-arginine doped KDP crystals

K. D. Parikh, D. J. Dave, B. B. Parekh and M. J. Joshi

- Bulletin of Materials Science, **30 (2)** (2007) 105-112
- (8) Inhibition of the Growth of Urinary Calcium Hydrogen Phosphate Dihydrate Crystals with Aqueous Extracts of *Tribulus terrestris* and *Bergenia ligulata*. Vimal S. Joshi, Bharat B. Parekh and Mihir J. Joshi, Ashok D. B. Vaidya, Urological Research, 33 (2005) 80.
- (9) The Inhibition of Growth of Urinary type Calcium Hydrogen Phosphate Dihydrate Crystals by Tartaric acid and Tamarind K.C. Joseph, Bharat B. Parekh and M.J. Joshi Current Science, 85 (2005) 1232.
- (10) Herbal Extracts of *Tribulus terrestris* and *Bergenia ligulata* Inhibit Growth of Calcium Oxalate Monohydrate Crystals *in vitro*V.S. Joshi, B. B. Parekh, M. J. Joshi and A.B. Vaidya
 Journal of Crystal Growth, 275(1-2), (2005), e-1403, 1408, (Proceeding of ICCG14. Grenoble, France, 9-13th August 2004)
- (11) Analysis of N-H...O and O-H...O Hydrogen bonding in 4-(2-hydroxy-phenylamino)-pent-3-en-2-one
 Rajnikant, Dinesh, Kamni, Purohit D.H., Joshi H.S., Parekh Bharat, Joshi M. J. and Kanwal Priyanka
 Heterocyclic Compound Vol.12 (2006) 129.
- (12) Dielectric Studies of Gel Grown Zinc Tartrate Crystals
 R.M. Dabhi, Bharat B. Parekh and M.J. Joshi
 Indian J. of Physics, 79(5) (2005) 503.
- (13) Growth and Characterization of Gel Grown Pure and Mixed Iron-Manganese Levo-Tartrate Crystals
 - S. J. Joshi, **B. B. Parekh**, K D. Vohra and M. J. Joshi Bulletin of Material Science 29(3) (2006) 307-312.
- (14) Investigation of Various Growth Parameters, FTIR and Thermal Studies of
- Gel Grown Pure and Mixed Levo-tartrates of Calcium and Strontium
 Ketan D. Parikh, Bharat B. Parekh, Dipak Dave and Mihir J. Joshi
 Indian Journal Physics, 80 (7) (2006) 719-726.
- (15) Dielectric study of Cu²⁺ doped calcium tartrate tetrahydrate crystals

S. R. Suthar, S. J. Joshi, **B. B. Parekh** & M. J. Joshi Indian Journal of Pure and Applied Physics **45** (2007) 48-51.

Papers Presented at National and International Conferences/ Seminar and Workshops:

- (1) Inhibition and Dissolution of CHPD Crystals by Citric Acid Solutions
 - B.B. Parekh, V.S. Joshi, K.C. Joseph and M.J. Joshi

Ninth National Seminar on Crystal Growth, Chennai, 24-26th, February 2003.

- (2) Thermal Study of Mixed iron (II) Cobalt Tartrate Crystals
 - Sherly Joseph, **Bharat Parekh**, and M.J. Joshi

Ninth National Seminar on Crystal Growth, Chennai, 24-26th, February 2003.

- (3) Effect of Tartaric Acid and Tamarind Solution on the Growth of CHPD Crystals
 - B.B. Parekh, K.C. Joseph, V.S. Joshi and M.J. Joshi

XXXIII National Seminar on Crystallography, National Chemical Laboratory, Pune, during 8-10 January 2004.

- (4) X-Ray Diffraction Study of Pure and Mixed Iron-Manganese Levo Tartrate
 Crystals
 - S.J. Joshi, Sailesh Suthar, Bharat B. Parekh and M.J.Joshi

XXXIII National Seminar on Crystallography, National Chemical Laboratory, Pune, during 8-10 January 2004.

(5) Mössbauer Spectroscopic and Magnetic Studies of Gel Grown Iron-Cobalt Mixed Tartrate Crystals

Sherly Joseph, **Bharat B. Parekh**, R. M. Dabhi, Sudhir Joshi, H.H. Joshi and M.J. Joshi

International Workshop on nano-particles, Magnetic Ion. & Magnetic Semiconductors Studied Mostly by Hyperfine Interactions., M.S.Univ. Baroda, India, during February 10-14, 2004.

(6) Kidney Stones: A Brief Overview with Physics Perspective.

Bharat Parekh

(2nd Prize for Best Research Paper presentation award)

(7) In Vitro Growth of CHPD Urinary Crystals in the Presence of Healthy Adult Urine and Tartaric Acid.

K.C. Joseph, V.S. Joshi, **B.B. Parekh**, A.B. Vaidya and M.J. Joshi 14th International Conference on Crystal Growth (ICCG-14), Grenoble, France, during 9th -13th August.

(8) The Herbal Extracts of *Tribulus terrestris* and *Bergenia ligulata* Inhibit Growth of Calcium Oxalate Monohydrate Crystals *in vitro*

V.S. Joshi, **B.B. Parekh,** M.J.Joshi and A.B. Vaidya

14th International Conference on Crystal Growth (ICCG-14), Grenoble, France, during 9th -13th August.

(9) Thermal, Kinetic, Thermodynamic and SEM Studies of Gel Grown Calcium Oxalate Monohydrate Single Crystals

Vimal S. Joshi, **Bharat B. Parekh**, Dipak Dave and Mihir J. Joshi International Conference on Solvo Thermal Reaction-6, (ICSTR-6), Mysore, 24-27 August '04.

- (10) The Effect of Unripe Mango Juice on the Growth of Brushite Crystals K.C. Joseph, Bharat B. Parekh, Dipak J.Dave and Mihir J. Joshi International Conference on Solvo Thermal Reaction-6, (ICSTR-6), Mysore, 24-27 August '04.
- (11) Growth, Inhibition and Characterization of Hydroxy Apatite Crystals
 (Best Research Paper presentation award)

Bharat B. Parekh, Dipak Dave, Vimal S. Joshi, Ashwin Raut, Sudha Sunder, Nancy Pandita, and Mihir J. Joshi
92nd Indian Science Congress, Ahmedabad during 3-7, January 2005

2) C. Alexandre Congress, Anniedadad during 5-7, January 2005

(12) Growth and Characterization of Pure and Mixed Iron-Manganese Levo-Tartrate Crystals.

S.J. Joshi, K.D. Vohra, **B.B. Parekh**, V.S. Joshi and M.J. Joshi, ICMAT 2005, Singapore, 3-8August, 2005.

(13) Dielectric Study of Copper Doped Calcium Tartrate Tetrahydrated Crystals

S.R. Suthar, S.J. Joshi, B.B. Parekh and M.J. Joshi

National Conference on Condensed Matter and Material Physics-06, M.S. Univ. Baroda, during 19-21 January, 2006,

(14) Growth and Characterization of L-histidine Doped KDP Crystals

Bharat B. Parekh, Dipak J. Dave, Ketan D. Parikh and Mihir J. Joshi One Day National Seminar on Recent Advances in Condensed Matter and Space

Physics, Saurashtra University, Rajkot, on 21st March 2006.

(15) Measurement of Induction Period Nucleation Kinetics of the L-histidine Doped KDP Crystals

Dipak J. Dave, **Bharat B. Parekh**, Ketan D. Parikh and Mihir J. Joshi

One Day National Seminar on Recent Advances in Condensed Matter and Space Physics, Saurashtra University, Rajkot, on 21st March 2006.

(16) Thermal Study of Gel Grown Iron- Manganese- Nickel Mixed Tartrate Crystals

Sudhir J. Joshi, **Bharat B. Parekh** and Mihir J. Joshi

One Day National Seminar on Recent Advances in Condensed Matter and Space Physics, Saurashtra University, Rajkot, on 21st March 2006.

(17) Thermal Studies of L- Argenine Doped KDP Crystals

Ketan D. Parikh, Bharat B. Parekh, Deepak J. Dave and M.J. Joshi

One Day National Seminar on Recent Advances in Condensed Matter and Space Physics, Saurashtra University, Rajkot, on 21st March 2006.

(18) Growth and Characterization of Sodium Oxalate Crystals

Bharat B. Parekh, Poorvesh M. Vyas, Kashmira Tank and M.J. Joshi 11th National Seminar on Crystal Growth (NSCG-11), Center for crystal growth, SSN college of Engineering, SSN Nagar, during 7-9 December 2006.

(19) Growth of Cholesterol Crystals

Poorvesh M. Vyas, **Bharat B. Parekh** and M.J.Joshi

XXI Gujarat Science Congress, Hemchandracharya North Gujarat University, Patan, 11th March 2007

(20) Dielectric Study of Mixed Crystals of Mn-Fe-Ni Tartrate

Kashmira P. Tank, S.J.Joshi, **Bharat B. Parekh**, Dhaval D. Khunti & M. J. Joshi XXI Gujarat Science Congress, Hemchandracharya North Gujarat University, Patan, 11th March, 2007

(21) Growth and Characterization of Gel grown Calcium Pyrophosphate Crystals Bharat B. Parekh and M.J. Joshi

(2nd Prize for Best Research Paper presentation award)

One Day National Seminar on Recent Trends in Materials Science, Department of Physics, Saurashtra University, Rajkot, on 25th March 2007.

(22) Dielectric Study of Mixed Crystals of Mn-Fe-Co Tartrate

Kashmira P. Tank, Sudhir J. Joshi, Bharat B. Parekh, C. K. Chauhan and M. J.

Joshi

One Day National Seminar on Recent Trends in Materials Science, Department of Physics, Saurashtra University, Rajkot, on 25th March 2007.

(23) Dielectric Study of Mn⁺⁺ doped ADP Crystals

Poorvesh M. Vyas, Purvesh Kurani, **B. B. Parekh**, K. D. Parikh and M. J. Joshi

One Day National Seminar on Recent Trends in Materials Science, Department of Physics, Saurashtra University, Rajkot, on 25th March 2007.

Attended Work shops/ Seminar/Training progrmme :

(1) International Workshop on Crystal Growth and Characterization of.

Technologically Important Materials

Crystal Growth Centre, Anna University campus, Chennai. February 24-28, 2004.

(2) International Workshop on nano-particles, Magnetic Ion. & Magnetic Semiconductors Studied Mostly by Hyperfine Interactions.

M.S.Univ. Baroda, Vadodara, India. February 10-14, 2004.

(3) Testing of Electric Equipments as Per Standard

Institute of Diploma Studies, Nirma University of Science and Technology, Ahmedabd, on 20th January 2007.

- (4) One day seminar on Microwave and its applications: Microwave 2007

 Department of Physics, University school of Science, Gujarat University

 Ahmedabad, on 21st January 2007.
- (5) Attended **Induction Training progrmme** for the one week duration of 31st

 December 2007 to 5th January 2008, organized by Institute of Diploma studies

 Nirma University of Science and Technology, Ahmedabad.