

NPS Trust - A/c UTI Retirement Solutions Scheme G – Tier II

Fund Size (October 29, 2020) : Rs. 29.98 Cr

Date of Inception : December 14, 2009

NAV as on October 29, 2020 : Rs. 27.9930

Annualised Return since Inception as on October 29, 2020 : 9.92% (CAGR)

Component of AuM:

| Asset Class (Break up) | <u>As On October 29, 2020</u> | |
|---|-------------------------------|--------------------|
| | Actual % of Investment | AUM (Rs. in Crore) |
| I (a) Govt. Securities | 96.27% | 28.86 |
| (b) Other Securities unconditionally guaranteed by Central or any State Govt. | | |
| (c) GILT Mutual Funds regulated by SEBI | | |
| II Money market Instruments including money market mutual funds | 2.17% | 0.65 |
| III Others | 1.56% | 0.47 |
| Total | 100.00% | 29.98 |

The bar chart displays the percentage distribution of the fund's assets across three categories. The y-axis represents the percentage from 0.00% to 120.00%. The x-axis lists the asset classes: GOVT. SECURITIES, MONEY MARKET, and NET CURRENT ASSETS. The bars are blue, and their values are labeled above them: 96.27% for GOVT. SECURITIES, 2.17% for MONEY MARKET, and 1.56% for NET CURRENT ASSETS.

Name of the Pension Fund : UTI RETIREMENT SOLUTIONS LIMITED

Name of the Scheme : NPS TRUST - A/C UTI RETIREMENT SOLUTIONS SCHEME G – TIER II

Portfolio Statement as on October 29, 2020

| Name of the Instrument | ISIN No. | Industry Code ** | Quantity | Mkt Value | % of Portfolio |
|--------------------------------------|--------------|------------------|------------|---------------|----------------|
| Debt Instruments - | | | | | |
| Central Government Securities | | | | | |
| 1. 7.57% GSEC 17/06/2033 | IN0020190065 | | 190,000.00 | 21,073,698.00 | 7.03 |
| 2. 8.13% NEW 30 YR GSEC 22/06/2045 | IN0020150044 | | 146,000.00 | 17,149,116.20 | 5.72 |
| 3. 6.68% GSEC 17/09/2031 | IN0020170042 | | 130,000.00 | 13,559,026.00 | 4.52 |
| 4. 7.40% GSEC 09/09/2035 | IN0020050012 | | 118,300.00 | 13,012,952.68 | 4.34 |
| 5. 8.30% GSEC 31/12/2042 | IN0020120062 | | 109,000.00 | 12,993,824.60 | 4.33 |
| 6. 8.17% GSEC 01/12/2044 | IN0020140078 | | 105,300.00 | 12,407,341.05 | 4.14 |
| 7. 6.79% GSEC 26/12/2029 | IN0020160118 | | 100,700.00 | 10,598,554.16 | 3.54 |
| 8. 7.88% GSEC 19/03/2030 | IN0020150028 | | 93,000.00 | 10,477,166.10 | 3.49 |
| 9. 7.69% GSEC 17062043 | IN0020190040 | | 90,000.00 | 10,174,689.00 | 3.39 |
| 10. 7.62% GSEC 15/09/2039 | IN0020190024 | | 70,000.00 | 7,802,480.00 | 2.60 |
| 11. 7.16% GSEC 20/09/2050 | IN0020200054 | | 70,000.00 | 7,462,392.00 | 2.49 |
| 12. 6.84% GSEC 19/12/2022 | IN0020160050 | | 65,000.00 | 6,842,595.50 | 2.28 |
| 13. 7.06% GSEC 10/10/2046 | IN0020160068 | | 65,000.00 | 6,807,554.00 | 2.27 |
| 14. 7.61% GSEC 09/05/2030 | IN0020160019 | | 50,000.00 | 5,538,740.00 | 1.85 |
| 15. 7.19% GSEC 15/09/2060 | IN0020200039 | | 50,000.00 | 5,375,020.00 | 1.79 |
| 16. 8.32% GSEC 02/08/2032 | IN0020070044 | | 46,000.00 | 5,354,298.80 | 1.79 |
| 17. 6.80% GSEC 15/12/2060 | IN0020200187 | | 50,000.00 | 5,095,365.00 | 1.70 |
| 18. 7.72% GSEC 26/10/2055 | IN0020150077 | | 40,000.00 | 4,592,276.00 | 1.53 |
| 19. 9.23% GSEC 23/12/2043 | IN0020130079 | | 35,000.00 | 4,523,550.50 | 1.51 |
| 20. 7.72% GSEC 25/05/2025 | IN0020150036 | | 40,000.00 | 4,398,004.00 | 1.47 |
| 21. 8.83% GOI 12/12/2041 | IN0020110063 | | 29,200.00 | 3,620,852.56 | 1.21 |
| 22. 6.57% GSEC 05/12/2033 | IN0020160100 | | 25,100.00 | 2,579,459.23 | 0.86 |
| 23. 8.28% G SEC 15/02/2032 | IN0020060086 | | 21,500.00 | 2,484,802.30 | 0.83 |
| 24. 7.73% GSEC 19/12/2034 | IN0020150051 | | 21,000.00 | 2,368,201.50 | 0.79 |
| 25. 8.97% GOI 05/12/2030 | IN0020110055 | | 18,600.00 | 2,241,614.34 | 0.75 |
| 26. 7.59% GSEC 20/03/2029 | IN0020150069 | | 20,000.00 | 2,202,426.00 | 0.73 |
| 27. 7.26% GSEC 14/01/2029 | IN0020180454 | | 20,000.00 | 2,163,872.00 | 0.72 |
| 28. 6.79% GSEC 15/05/2027 | IN0020170026 | | 20,000.00 | 2,116,086.00 | 0.71 |
| 29. 8.24% GOI 10/11/2033 | IN0020140052 | | 17,000.00 | 1,982,203.40 | 0.66 |
| 30. 8.28% GOI 21/09/2027 | IN0020070069 | | 16,500.00 | 1,878,858.30 | 0.63 |
| 31. 9.20% GOI 30/09/2030 | IN0020130053 | | 10,000.00 | 1,214,771.00 | 0.41 |
| 32. 7.16% GSEC 20/05/2023 | IN0020130012 | | 8,000.00 | 852,459.20 | 0.28 |
| 33. 8.33% G SEC 07/06/2036 | IN0020060045 | | 6,900.00 | 820,426.56 | 0.27 |
| 34. 8.26% GOI 02/08/2027 | IN0020070036 | | 5,200.00 | 589,758.00 | 0.20 |
| 35. 8.33% GOI 09/07/2026 | IN0020120039 | | 5,000.00 | 565,269.00 | 0.19 |
| 36. 8.20% GOI 24/09/2025 | IN0020120047 | | 4,000.00 | 448,000.00 | 0.15 |
| 37. 8.15% NEW 10 YEAR GOI 11/06/2022 | IN0020120013 | | 3,000.00 | 318,793.80 | 0.11 |
| 38. 9.15% GOI 14/11/2024 | IN0020110048 | | 2,000.00 | 228,756.60 | 0.08 |
| State Development Loans | | | | | |
| 1. 8.40% RAJASTHAN 13/03/2029 | IN2920180337 | | 30,000.00 | 3,379,437.00 | 1.13 |
| 2. 8.19% UK 10/04/2029 | IN3620190014 | | 30,000.00 | 3,341,643.00 | 1.11 |
| 3. 8.18% TAMIL NADU 19/12/2028 | IN3120180192 | | 30,000.00 | 3,340,098.00 | 1.11 |
| 4. 8.32% UP 13/02/2029 | IN3320180158 | | 28,700.00 | 3,217,539.78 | 1.07 |
| 5. 8.68% TAMIL NADU 10/10/2028 | IN3120180143 | | 20,000.00 | 2,284,268.00 | 0.76 |
| 6. 8.45% UP 27/02/2029 | IN3320180166 | | 20,000.00 | 2,259,636.00 | 0.75 |
| 7. 8.44% BIHAR 06/03/2029 | IN1320180061 | | 20,000.00 | 2,258,974.00 | 0.75 |
| 8. 8.49% RAJASTHAN 21/08/2028 | IN2920180162 | | 20,000.00 | 2,253,306.00 | 0.75 |
| 9. 8.34% UP 06/02/2029 | IN3320180141 | | 20,000.00 | 2,244,284.00 | 0.75 |
| 10. 8.48% KERALA 08/08/2030 | IN2020180070 | | 19,600.00 | 2,243,169.04 | 0.75 |
| 11. 8.30% KARNATAKA 20/02/2029 | IN1920180172 | | 20,000.00 | 2,240,088.00 | 0.75 |
| 12. 8.38% KARNATAKA 31/10/2022 | IN1920180040 | | 20,000.00 | 2,147,238.00 | 0.72 |
| 13. 7.09% UP 12/02/2030 | IN3320190215 | | 20,000.00 | 2,090,892.00 | 0.70 |
| 14. 7.05% MAHARASHTRA 07/10/2032 | IN2220200231 | | 20,000.00 | 2,088,512.00 | 0.70 |
| 15. 8.29% UK 14/03/2028 | IN3620170172 | | 17,000.00 | 1,889,342.60 | 0.63 |
| 16. 8.30% HP 09/01/2029 | IN1720180042 | | 16,200.00 | 1,812,436.56 | 0.60 |
| 17. 8.84% RAJASTHAN 12/09/2028 | IN2920180196 | | 15,600.00 | 1,792,073.40 | 0.60 |
| 18. 8.38% GUJARAT 27/02/2029 | IN1520180309 | | 15,700.00 | 1,768,972.38 | 0.59 |
| 19. 8.22% KARNATAKA 30/01/2031 | IN1920180156 | | 15,100.00 | 1,699,418.93 | 0.57 |
| 20. 8.15% BIHAR 27/03/2028 | IN1320170062 | | 15,000.00 | 1,655,508.00 | 0.55 |
| 21. 8.73% UP 24/10/2028 | IN3320180067 | | 13,100.00 | 1,499,241.29 | 0.50 |
| 22. 8.45% ANDHRA PRADESH 27/06/2028 | IN1020180148 | | 13,000.00 | 1,461,608.20 | 0.49 |
| 23. 8% KERALA 11/04/2028 | IN2020180013 | | 11,400.00 | 1,251,533.04 | 0.42 |
| 24. 7.19% UP 28/09/2026 | IN3320160234 | | 10,700.00 | 1,141,197.80 | 0.38 |
| 25. 8.62% PUNJAB 13/06/2028 | IN2820180056 | | 10,000.00 | 1,132,041.00 | 0.38 |
| 26. 8.43% UP 06/03/2029 | IN3320180174 | | 10,000.00 | 1,128,849.00 | 0.38 |
| 27. 8.39% BIHAR 13/03/2029 | IN1320180079 | | 10,000.00 | 1,126,530.00 | 0.38 |
| 28. 8.39% UP 13/03/2029 | IN3320180182 | | 10,000.00 | 1,126,530.00 | 0.38 |
| 29. 8.08% MAHARASHTRA 26/12/2028 | IN2220180052 | | 10,100.00 | 1,119,709.23 | 0.37 |
| 30. 8.34% ANDHRA PRADESH 30/05/2027 | IN1020180098 | | 10,000.00 | 1,113,515.00 | 0.37 |
| 31. 8.28% TAMIL NADU 14/03/2028 | IN3120170151 | | 10,000.00 | 1,112,038.00 | 0.37 |

| | | | | | |
|---|--------------|-------|---------------------|-----------------------|---------------|
| 32. 8.10% WEST BENGAL 27/03/2029 | IN3420180207 | | 10,000.00 | 1,111,135.00 | 0.37 |
| 33. 8.25% HARYANA 21/02/2028 | IN1620170135 | | 10,000.00 | 1,109,512.00 | 0.37 |
| 34. 8.09% RAJASTHAN 26/12/2028 | IN2920180279 | | 10,000.00 | 1,107,241.00 | 0.37 |
| 35. 8.16% RAJASTHAN 09/05/2028 | IN2920180030 | | 10,000.00 | 1,104,991.00 | 0.37 |
| 36. 7.86% RAJASTHAN 27/12/2027 | IN2920170122 | | 10,000.00 | 1,091,000.00 | 0.36 |
| 37. 7.78% TELANGANA SDL 29/05/2027 | IN4520190021 | | 10,000.00 | 1,084,749.00 | 0.36 |
| 38. 7.48% ORISSA 13/09/2032 | IN2720170058 | | 10,000.00 | 1,078,343.00 | 0.36 |
| 39. 7.55% MADHYA PRADESH 11/10/2027 | IN2120170054 | | 10,000.00 | 1,073,419.00 | 0.36 |
| 40. 7.17% PUNJAB 05/02/2030 | IN2820190121 | | 10,000.00 | 1,048,757.00 | 0.35 |
| 41. 8.38% TAMIL NADU 27/01/2026 | IN3120150187 | | 8,000.00 | 891,948.80 | 0.30 |
| 42. 8.34% KERALA 22/12/2020 | IN2020100029 | | 7,200.00 | 724,883.04 | 0.24 |
| 43. 8.41% KERALA 06/06/2028 | IN2020180047 | | 6,000.00 | 673,507.80 | 0.22 |
| 44. 8.17% TAMIL NADU 26/11/2025 | IN3120150146 | | 5,000.00 | 556,908.50 | 0.19 |
| 45. 8.20% BIHAR 23/01/2029 | IN1320180038 | | 2,900.00 | 322,739.84 | 0.11 |
| 46. 8.39% TAMIL NADU 05/01/2021 | IN3120100109 | | 2,000.00 | 201,690.60 | 0.07 |
| 47. 8.43% KARNATAKA 08/12/2020 | IN1920100022 | | 1,000.00 | 100,494.70 | 0.03 |
| 48. 8.40% GUJARAT 24/11/2020 | IN1520100083 | | 1,000.00 | 100,301.50 | 0.03 |
| Government Guaranteed Bond | | | | | |
| 1. 9.95% FOOD CORP OF INDIA 07/03/2022 | INE861G08035 | 46101 | 10,000.00 | 1,075,611.00 | 0.36 |
| 2. 6.79% BSNL 23/09/2030 | INE103D08021 | 61202 | 10,000.00 | 1,019,117.00 | 0.34 |
| Cash / Cash Equivalent & Net Current Assets | | | | | |
| Money Market Mutual Funds | | | | | |
| 1. UTI - LIQUID CASH PLAN-INSTITUTIONAL-DIRECT-GROWTH | 120304 | 66301 | 1,955.68 | 6,504,631.78 | 2.17 |
| Net Current Assets | | | | 4,675,796.79 | 1.56 |
| GRAND TOTAL | | | 2,592,555.68 | 299,791,660.98 | 100.00 |
| Average Maturity of Portfolio (in yrs) | | | | | |
| | | | 15.02 | | |
| Modified Duration (in yrs) | | | | | |
| | | | 7.87 | | |
| Yield to Maturity (%) (annualised) (at market price) | | | | | |
| | | | 6.29 | | |
| Credit Rating Exposure | | | | | |
| Central Government Securities | | | | 213,915,253.38 | 71.35 |
| State Development Loans | | | | 72,601,251.03 | 24.22 |
| Government Guaranteed Bond | | | | 2,094,728.00 | 0.70 |
| AAA / Equivalent | | | | 0.00 | 0.00 |
| A1+ (For Commercial paper) | | | | 0.00 | 0.00 |
| AA+ / Equivalent | | | | 0.00 | 0.00 |
| AA / Equivalent | | | | 0.00 | 0.00 |
| AA- / Equivalent | | | | 0.00 | 0.00 |
| A+ / Equivalent | | | | 0.00 | 0.00 |
| A / Equivalent | | | | 0.00 | 0.00 |
| A- / Equivalent | | | | 0.00 | 0.00 |
| BBB+ / Equivalent | | | | 0.00 | 0.00 |
| BBB / Equivalent | | | | 0.00 | 0.00 |
| BBB- / Equivalent | | | | 0.00 | 0.00 |
| Lower (Below Investment Grade) (out of above Net NPA) | | | | 0.00 | 0.00 |
| Total | | | | 288,611,232.41 | 96.27 |
| Bank FD | | | | 0.00 | 0.00 |
| Equity | | | | 0.00 | 0.00 |
| Equity Mutual Funds | | | | 0.00 | 0.00 |
| Money Market Mutual Funds | | | | 6,504,631.78 | 2.17 |
| Cash / Cash Equivalent Net Current Assets | | | | 4,675,796.79 | 1.56 |
| Application Pending Allotment - NCDs | | | | 0.00 | 0.00 |
| Others (Treasury Bills and Gilt Mutual Funds) | | | | 0.00 | 0.00 |
| Grand Total | | | | 299,791,660.98 | 100.00 |
| Unit Outstanding | | | 10,709,494.7463 | | |
| NAV | | | 27.9930 | | |

**** Industry Code details given in Annexure 1**

Note:

| | |
|---|---------|
| Total NPAs provided for and its percentage to NAV | NIL |
| Total value and Percentage of illiquid equity shares | NIL |
| NAV at the beginning of the period | 27.4319 |
| NAV at the end of the period | 27.9930 |
| Total Outstanding exposure in derivative instruments at the end of the period | NIL |
| Total Infrastructure investments | NIL |

| Industry Code | Industry Name |
|---------------|---|
| 05102 | Belowground mining of hard coal |
| 06102 | On shore extraction of crude petroleum |
| 07100 | Mining of iron ores |
| 10402 | Manufacture of vegetable oils and fats excluding corn oil |
| 10502 | Manufacture of milk-powder, ice-cream powder and condensed milk except baby milk food |
| 10712 | Manufacture of biscuits, cakes, pastries, rusks etc. |
| 10721 | Manufacture or refining of sugar (sucrose) from sugarcane |
| 10791 | Processing and blending of tea including manufacture of instant tea |
| 10799 | Other semi-processed, processed or instant foods n.e.c. except farinaceous products and malted foods and manufacturing activities like manufacture of egg powder, sambar powder etc. (this excludes the activities covered under 10619) |
| 11011 | Manufacture of distilled, potable, alcoholic beverages such as whisky, brandy, gin, "mixed drinks" etc. |
| 12003 | Manufacture of cigarettes, cigarette tobacco |
| 13114 | Preparation and spinning of man-made fiber including blended man-made fiber |
| 13121 | Weaving, manufacture of cotton and cotton mixture fabrics |
| 13124 | Weaving, manufacturing of man-made fiber and man-made mixture fabrics |
| 13134 | Finishing of man-made and blended man-made textiles |
| 14101 | Manufacture of All Types of Textile Garments and Clothing Accessories |
| 15201 | Manufacture of leather footwear such as shoes, sandals, chappals, leather-cum-rubber/plastic cloth sandles and chappals |
| 17013 | Manufacture of paper and paper rolls not further processed |
| 19201 | Production of liquid and gaseous fuels, illuminating oils, lubricating oils or greases or other products from crude petroleum or bituminous minerals |
| 19209 | Manufacture of other petroleum n.e.c. (includes manufacture of petroleum jelly, micro-crystalline petroleum wax, slack wax, ozokerite, lignite wax, petroleum coke, petroleum bitumen and other residues of petroleum oils or of oils obtained from bituminous minerals) |
| 20219 | Manufacture of other agrochemical products n.e.c. |
| 20221 | Manufacture of paints and varnishes, enamels or lacquers |
| 20231 | Manufacture of soap all forms |
| 20235 | Manufacture of preparations for oral or dental hygiene (includes manufacture of toothpastes, toothpowder, mouthwash, oral, perfumes, dental fixative pastes and powders etc.) |
| 20236 | Manufacture of hair oil, shampoo, hair dye etc. (includes manufacture of shampoos, hair sprays, hair fixers, hair oils, hair creams, hair dyes and bleaches and preparations for permanent waving or straightening of the hair etc.) |
| 21002 | Manufacture of allopathic pharmaceutical preparations |
| 22111 | Manufacture of rubber tyres and tubes for motor vehicles, motorcycles, scooters, three-wheelers, tractors and aircraft |
| 23941 | Manufacture of clinkers and cement |
| 24102 | Manufacture of direct reduction of iron (sponge iron) and other spongy ferrous products |
| 24105 | Manufacture of hot-rolled and cold-rolled products of steel |
| 24201 | Manufacture of Copper from ore, and other copper products and alloys |
| 24202 | Manufacture of Aluminium from alumina and by other methods and products of aluminium and alloys |
| 24203 | Manufacturing of lead, zinc and tin products and alloys |
| 25910 | Forging, pressing, stamping and roll-forming of metal; powder metallurgy |
| 26309 | Manufacture of other communication equipments n.e.c. |
| 27104 | Manufacture of electricity distribution and control apparatus (electrical apparatus for switching or protecting electrical circuits (e.g. switches, fuses, voltage limiters, surge suppressors, junction boxes etc.) for a voltage exceeding 1000 volts; similar apparatus (including relays, sockets etc.) for a voltage not exceeding 1000 volts; boards, panels, consoles, cabinets and other bases equipped with two or more of the above apparatus for electricity control or distribution of electricity including power capacitors.) |
| 27201 | Manufacture of primary cells and primary batteries and rechargeable batteries, cells containing manganese oxide, mercuric oxide silver oxide or other material |
| 27400 | Manufacture of electric lighting equipment |
| 27900 | Manufacture of other electrical equipment |
| 28110 | Manufacture of engines and turbines, except aircraft, vehicle and cycle engines |
| 28199 | Manufacture of other general purpose machinery n.e.c. (fans intended for industrial applications, exhaust hoods for commercial, laboratory or industrial use; calendering or other rolling machines other than for metals or glass; gaskets and similar joints made of a combination of materials or layers of the same material and other general purpose machinery including manufacture of parts and accessories for general purpose machinery and equipment.) |
| 28211 | Manufacture of tractors used in agriculture and forestry |
| 29101 | Manufacture of passenger cars |
| 29102 | Manufacture of commercial vehicles such as vans, lorries, over-the-road tractors for semi-trailers etc. |
| 29103 | Manufacture of chassis fitted with engines for the motor vehicles included in this class |
| 29304 | Manufacture of motor vehicle electrical equipment, such as generators, alternators, spark plugs, ignition wiring harnesses, power window and door systems, assembly of purchased gauges into instrument panels, voltage regulators, etc. |
| 30911 | Manufacture of motorcycles, scooters, mopeds etc. and their engine |

| | |
|-------|--|
| 32111 | Manufacture of jewellery of gold, silver and other precious or base metal metal clad with precious metals or precious or semi-precious stones, or of combinations of precious metal and precious or semi-precious stones or of other materials |
| 35101 | Electric power generation by hydroelectric power plants |
| 35102 | Electric power generation by coal based thermal power plants |
| 35104 | Electric power generation and transmission by nuclear power plants |
| 35106 | Electric power generation using other non conventional sources |
| 35107 | Transmission of electric energy |
| 35202 | Distribution and sale of gaseous fuels through mains |
| 41001 | Construction of buildings carried out on own-account basis or on a fee or contract basis |
| 42101 | Construction and maintenance of motorways, streets, roads, other vehicular and pedestrian ways, highways, bridges, tunnels and subways |
| 42202 | Construction/erection and maintenance of power, telecommunication and transmission lines |
| 42902 | Construction of waterways, harbours and river works, dredging of waterways |
| 42909 | Other civil engineering projects n.e.c. |
| 46101 | Activities of commission agents, brokers dealing in wholesale trade of agricultural raw material, live animals, food, beverages, intoxicants and textiles |
| 47510 | Retail sale of textiles in specialized stores |
| 49110 | Passenger rail transport |
| 50120 | Sea and coastal freight water transport |
| 51101 | Passenger Airways |
| 51201 | Freight air transport services |
| 52213 | Switching and shunting |
| 52220 | Service activities incidental to water transportation |
| 55101 | Hotels and Motels, inns, resorts providing short term lodging facilities; includes accommodation in house boats |
| 60200 | Television Programming and Broadcasting Activities |
| 61101 | Activities of basic telecom services: telephone, telex and telegraph (includes the activities of STD/ISD booths) |
| 61104 | Activities of providing internet access by the operator of the wired infrastructure |
| 61202 | Activities of maintaining and operating paging, cellur and other tetecommunication networks |
| 62011 | Writing , modifying, testing of computer program to meet the needs of a particular client excluding web-page designing |
| 64191 | Monetary intermediation of commercial banks, saving banks. postal savings bank and discount houses |
| 64192 | Activities of specialized institutions granting credit for house purchases that also take deposits |
| 64199 | Other monetary intermediation services n.e.c. |
| 64200 | Activities of holding companies |
| 64920 | Other credit granting |
| 64990 | Other financial service activities, except insurance and pension funding activities, n.e.c. |
| 65110 | Life Insurance |
| 65120 | Non-Life Insurance |
| 66120 | Security and commodity contracts brokerage |
| 66301 | Management of Mutual Funds |
| 68100 | Real estate activities with own or leased property |
| 72100 | Research and experimental development on natural sciences and engineering |