Sample Budget Narrative

	Year 1	Year 2	Year 3	Total
Personnel	$54,446.00	$56,078.00	$57,761.00	$168,285.00
Fringe Benefits	$2,106.00	$2,233.00	$2,370.00	$6,709.00
Travel	$8,000.00	$8,000.00	$8,000.00	$24,000.00
Supplies	$9,000.00	$9,000.00	$8,000.00	$26,000.00
Other	$29,740.00	$31,131.00	$32,591.00	$93,462.00
Direct Cost	$103,292.00	$106,442.00	$108,722.00	$318,456.00
Indirect Cost	$43,024.00	$44,026.00	$44,494.00	$131,544.00
Total	**$146,316.00**	**$150,468.00**	**$153,216.00**	**$450,000.00**

a. Personnel $168,285

John Smith; Assistant Professor
The University is requesting funds to support Professor Smith for ½ month each summer. His summer rate has been calculated at 1/9 of his annual 9/12 academic year salary. We anticipate a 3% annual escalation each July 1st.

Monthly 9/12 rate: $9,299.25
Annual rate: $9,299.25 * 12mos = $111,591
Summer Rate: $111,591 / 9mos = $12,399

Yr. 1: July 2020 summer rate: $12,399 + 3% = $13,154; for ½ month = $6,577.00
Yr. 2: July 2021 summer rate: $13,154 + 3% = $13,549; for ½ month = $6,774.00
Yr. 3: July 2022 summer rate: $13,549 + 3% = $13,955; for ½ month = $6,978.00
Total: $20,329.00

Adam Smith; Assistant Professor
The University is requesting funds to support Professor Smith for ½ month each summer. His summer rate has been calculated at 1/9 of his 9/12 academic year salary. We anticipate a 3% annual escalation each July 1st.

Monthly 9/12 rate: $8,058.25
Annual rate: $8,058.25 * 12mos = $96,699
Summer Rate: $96,699 / 9mos = $10,744

Yr. 1: July 2020 summer rate: $10,744 + 3% = $11,398; for ½ month = $5,700.00
Yr. 2: July 2021 summer rate: $11,398 + 3% = $11,740; for ½ month = $5,870.00
Yr. 3: July 2022 summer rate: $11,740 + 3% = $12,092; for ½ month = $6,046.00
Total: $17,616.00

PhD Student Researchers (2 students at 32.39% time for 36 months each)
Funds are requested to support two GSRs working under the direct supervision of one of the Faculty Development Recipients at 32.39% time at Step 7 for 36 months.

PhD students in the Department of Materials Science receive compensation according to the department's compensation plan. The current plan is 48.7% time at Step 7 of the GSR pay scale for all 12 months of the calendar year. We are only requesting compensation for 32.39% time. The remainder of the students' compensation will be paid from cost share commitment on this project. We anticipate a 3% annual escalation to the GSR pay scale each October 1st. A copy of the GSR pay scale is attached.

Year 1
Summer 2019: 2mos * 32.82% time * Step 7 rate ($5223/mo) * 2GSRs = $6,857.00
Academic Yr. 2020: 9mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $31,781.00
Summer 2020: 1mo * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $3,531.00
Total: $42,169.00

Year 2
Summer 2020: 2mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $7,062.00
Academic Yr. 20/21: 9mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $32,735.00
Summer 2021: 1mo * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $3,637.00
Total: $43,434.00

Year 3
Summer 2021: 2mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $7,274.00
Academic Yr. 21/22: 9mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $33,717.00
Summer 2022: 1mos * 32.82% time * Step 7 rate ($5223/mo+3%) * 2GSRs = $3,746.00
Total: $44,737.00

b. Fringe Benefits $6,709

The currently posted 19/20 fringe benefits rates for the faculty summer salary is 10.3%. The currently posted 19/20 fringe benefits rate for graduate students is 1.9%. We anticipate a 3% annual escalation to these rates each July 1st. A copy of our fringe benefit rates is attached.

Year 1
Faculty: $12,276 * 10.3% + 3% escalation = $1,303.00
GSRs: $42,169 * 1.9% * (11/12mos) = $734.00
$42,169 * 1.9% + 3% escalation * (1/12mos) = $69.00
Total: $2,106.00

Year 2
Faculty: $12,644 * 10.3% + $3\%^2$ = $1,381.00
GSRs: $43,434 * 1.9% + 3% * (11/12mos) = $779.00
$43,434 * 1.9% + $3\%^2$ * (1/12mos) = $73.00
Total: $2,233.00

Year 3
Faculty: $13,024 * 10.3% + $3\%^3$ = $1,466.00
GSRs: $44,737 * 1.9% + $3\%^2$ * (11/12mos) = $827.00
$44,737 * 1.9% + $3\%^3$ * (1/12mos) = $77.00
Total: $2,370.00

c. Travel $24,000

We are requesting funds for each professor and each graduate student to attend one professional conference and/or visit another university with a similar program per year such as, but not limited to, the Materials Research Society annual meeting.

Faculty Registration: $750 (MRS Meeting) RT
Airfare to Boston, MA: $628
Airfare booking fee: $7.50
Per Diem Lodging: $273 * 2 nights = $546

Actual Meals & Incidentals NTE the campus cap = $62 * 3 days = $186
Total Faculty Travel: $2,117.50 per faculty x 2 people x 3 years = **$12,705.00**

Student Registration: $180 (MRS Meeting) RT
Airfare to Boston, MA: $628
Airfare booking fee: $7.50
Per Diem Lodging: $273 * 3 nights = $819
Actual Meals & Incidentals NTE the campus cap = $62 * 3 days = $248
Total Student Travel: $1,882.50 per student x 2 people x 3 years = **$11,295.00**

d. Supplies $26,000

We are requesting funds for supplies, for use of the Research Center services and facilities, and for Course Development. Each of these will be split between the two faculty participants.

ANNUAL RESEARCH SUPPLIES

ITEM	YEAR 1 BUDGET	YEAR 1 BUDGET	YEAR 1 BUDGET
Research office supplies (lab notebooks, paper, pens, USB drives)	$350	$350	$350
Target materials for sputtering	$500	$400	$400
Argon and Oxygen gas cylinder	$200	$200	$200
Substrates for thin films	$200	$400	$400
Chemicals/consumables	$600	$300	$300
Gloves, Al Foil, Kim Wipes, Kapton Tape	$150	$150	$150
Glovebags (2 each at $80)	$160	$160	$160
Vacuum parts, gauges, gaskets	$350	$250	$250
Recharge: Inductively Couple Plasma - Mass Spectrometer ($160/hr)	$480	$480	$480
Recharge: Transmission Electron Microscopy ($57/hr)	$840	$1,140	$1,140
Conference poster printing	$170	$170	$170
McClellan Nuclear Reactor time (16 hours at $125)	$2,000	$2,000	$2,000
McClellan Nuclear Reactor labor (20 hours at $100)	$2,000	$2,000	$2,000
Course development (undergraduate assistant 70 hrs at $10/hr, demonstration materials)	$1,000	$1,000	
ANNUAL SUBTOTAL	$9,000	$9,000	$8,000

e. Other $93,462

<u>Invited Speakers</u>

We are requesting support for travel payments to invite 2-3 external speakers per year to campus to present seminars in the area of nuclear science.

RT Airfare from Knoxville, TN to Chicago, IL: $541 Airfare
booking fee: $8
Per Diem Lodging: $125 x 2 night = $250 Meals &
Incidentals: $62 x 3 = **$186.00**

RT Airfare from Denver, CO to Chicago, IL: $498 Airfare

booking fee: $8
Per Diem Lodging: $125 x 2 night = $250 Meals &
Incidentals: $62 x 3 = $186 Subtotal: $1927 x 3
years = **$5,781.00**

Fee Remissions

We are requesting funds to provide graduate student resident tuition and fees for both students. Graduate student tuition and fees are a required cost of employing graduate student researchers on extramural funds at the University. We have based our calculations on currently posted estimates for the 2019/2020 academic year. We estimate that these fees will increase by 5% per year. We have also applied a 25% discount provided by the campus for extramural research. A copy of the fee remission policy and current tuition rates is attached.

Year 1: $18,542 * 2 students less 25% discount = **$27,813.00**
Year 2: $18,542 + 5% escalation * 2 students less 25% discount = **$29,204.00**
Year 3: $18,542 + $5\%^2$ * 2 students less 25% discount = **$30,664.00**

f. Indirect cost $131,542

Indirect costs are calculated using Modified Total Direct Costs and applying our Federally Negotiated rate of 57%. Fee Remissions are not subject to indirect costs. The indirect cost base is $230,775.00. The indirect rate agreement is attached.

Year 1: $75,479.00 x 57% = **$43,024.00**
Year 2: $77,238.00 x 57% = **$44,026.00**
Year 3: $78,048.00 x 57% = **$44,494.00**